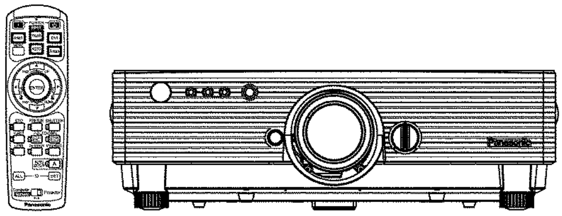
ORDER NO. VED0409358C0
D10

Service Manual

DLP™ Based Projector

PT-D5500U
PT-D5500E
PT-D5500UL
PT-D5500EL



Panasonic

© 2004 Matsushita Electric Industrial Co., Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

The service technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this service manual.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Trademark Acknowledgements

- Digital Light Processing, DLP, and Digital Micromirror Device, DMD are registered trademarks of the Texas Instruments.
- VGA and XGA are trademarks of International Business Machines Corporation.
- S-VGA is a registered trademark of the Video Electronics Standards Association.
- "Microsoft Windows" is a registered trademark of the Microsoft Corporation (U.S.A.) in the U.S. and other countries.
- "Netscape" and "Netscape Navigator" are registered trademarks of the Netscape Communications Corporation in the U.S. and other countries.

All other trademarks are the property of the various trademark owners.

CAUTION
Lithium Battery
Risk of explosion if battery is replaced by an incorrect type. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
(See also Operating Instructions.)

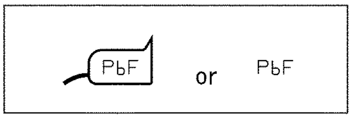
Precaution
If using of this projector at high elevations (above 1 400 m), set FAN CONTROL to HIGH.
Failure to observe this may cause malfunctions.
Never use this projector at an elevation of 2 700 m or higher.
Using this projector at high elevations, consult your dealer or Authorized Service Center about preparations.

About lead free solder (PbF)

This projector is using the P.C.Board which applies lead free solder. The use of lead free solder is recommended from the standpoint of antipollution for the global environment in service.
Notes:

- Lead free solder: Sn-Ag-Cu (tin, silver and copper) has a higher melting point (approx. 217°C) than standard solder. Typically, the melting point is 30°C to 40°C higher. When servicing, use a high temperature soldering iron with temperature limitation function and set it to 370±10°C.
- Be precautious about lead free solder: Sn-Ag-Cu (tin, silver and copper) will tend to splash when heated too high (approx. 600°C or higher).
- Use lead free solder for the P.C.Board (specified on it as "PbF") which uses lead free solder. (When you unavoidably use lead solder, use lead solder after removing lead free solder. Or be sure to heat the lead free solder until it melts completely, before applying lead solder.)
- After soldering to double layered P.C.Boards, check the component side for excess solder which may flow onto the opposite side.

About the identification of the lead free solder P.C.Board
For the P.C.Board which applies lead free solder, the symbol as shown in the figure below is printed or stamped on the surface or the back of P.C.Board.



For US

IMPORTANT SAFETY NOTICE

There are special parts used in Panasonic LCD Projectors which are important for safety. These parts are shaded on the schematic diagram. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of PANASONIC BROADCAST & TELEVISION SYSTEMS COMPANY.

WARNING:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any unauthorized changes or modifications to this equipment will void the users authority to operate.

CONTENTS

Page

1 Safety Precautions 4
- 1.1. General Guidelines 4
- 1.2. Leakage Current Check 4

2 Specifications 5

3 Function for Safety 7
- 3.1. Interlock Switch 7

4 Serviceman Mode 7
- 4.1. Setting to Serviceman Mode 7
- 4.2. Resetting to User Mode 8
- 4.3. Functions in Serviceman Mode 9

5 Using the Serial Terminals 14
- 5.1. Examples of Connection 14
- 5.2. Pin Assignments and Signal Names 14
- 5.3. Communication Conditions (Factory Setting) 14
- 5.4. Basic Format 14
- 5.5. Procedure of Communication Condition Settings 15
- 5.6. Control commands 16
- 5.7. Cable specifications 19

6 Using a Wired Remote Control 20
- 6.1. Connection Example 20
- 6.2. Setting the Projector ID Number for Remote Control 20

7 Support for Service 21
- 7.1. Supporting Methods 21
- 7.2. Note for Replacement of P.C.Boards 21
- 7.3. Replacement of the lithium battery on the A-P.C.Board 21

8 Cautions for Service 21
- 8.1. Servicing Methods 21

9 Parts Location 22
- 9.1. Electrical Parts Location 22
- 9.2. Electromechanical Parts Location 22

10 Replacement of Lamp Unit 23
- 10.1. Precautions on Lamp Unit Replacement 23
- 10.2. Timing of Lamp Unit Replacement 23
- 10.3. Indication of Lamp Monitor 24
- 10.4. Procedure of Lamp Unit Replacement 24

11 Disassembly Instructions 27
- 11.1. Flowchart for Disassembly 27
- 11.2. Removal of Upper Case 28
- 11.3. Removal of A-P.C.Board 28
- 11.4. Removal of J-P.C.Board 29
- 11.5. Removal of D-P.C.Board 29
- 11.6. Removal of Power Module 30
- 11.7. Removal of R-P.C.Board 30
- 11.8. Removal of S-P.C.Board 30
- 11.9. Removal of Ballast-1 and Ballast-2 Modules 31
- 11.10. Removal of Lamp Unit 33
- 11.11. Removal of Projection Lens 34
- 11.12. Removal of Analysis Block 34
- 11.13. Removal of Synthesis Mirror 35
- 11.14. Removal of Color Wheel Block (Analysis Block) 36
- 11.15. Removal of Rod (complete) 36
- 11.16. Removal of Full Reflection Mirror (complete) 37
- 11.17. Removal of DMD Block (complete) 37

12 Troubleshooting 38

13 Interconnection Block Diagram 49
- 13.1. Interconnection Block Diagram (1/3) 49
- 13.2. Interconnection Block Diagram (2/3) 50
- 13.3. Interconnection Block Diagram (3/3) 51

14 Block Diagram 53
- 14.1. Power Supply 53
- 14.2. Signal Processing (1/2) 54
- 14.3. Signal Processing (2/2) 55
- 14.4. Fan/Motor Drive 56

15 Schematic Diagram 57
- 15.1. A-P.C.Board (1/11) 58
- 15.2. A-P.C.Board (2/11) 59
- 15.3. A-P.C.Board (3/11) 60
- 15.4. A-P.C.Board (4/11) 61
- 15.5. A-P.C.Board (5/11) 62
- 15.6. A-P.C.Board (6/11) 63
- 15.7. A-P.C.Board (7/11) 64
- 15.8. A-P.C.Board (8/11) 65
- 15.9. A-P.C.Board (9/11) 66
- 15.10. A-P.C.Board (10/11) 67
- 15.11. A-P.C.Board (11/11) 68
- 15.12. CW/D/R/S-P.C.Board 69
- 15.13. J-P.C.Board 70

16 Circuit Boards 71
- 16.1. A-P.C.Board (Foil Side) 71
- 16.2. A-P.C.Board (Component Side) 72
- 16.3. J-P.C.Board 73

17 Terminal guide of ICs and transistors 75

18 Exploded Views 76

19 Replacement Parts List 80

1 Safety Precautions

1.1. General Guidelines

- For continued safety, no modification of any circuit must be attempted.
- Unplug the power cord from the power outlet before disassembling this projector.
- It is advisable to use an isolation transformer in the AC power line before the service.
- Observe the original lead dress during the service. If a short circuit is found, replace all the parts overheated or damaged by the short circuit.
- After the service, all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations must be properly installed.
- After the service, check the leakage current to prevent the customer from getting an electric shock.

1.2. Leakage Current Check

1. Prepare the measuring circuit as shown in Fig.1.

   Be sure to use a voltmeter having the performance described in Table 1.

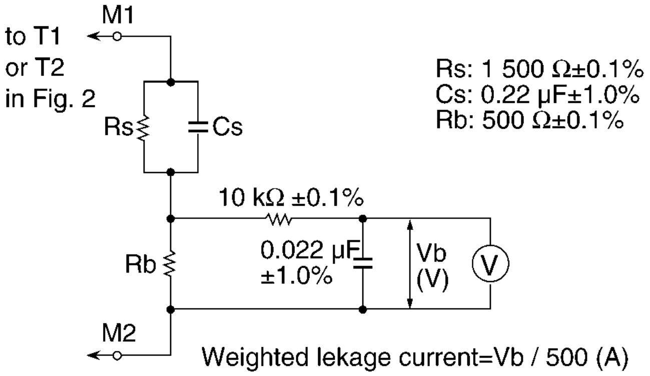

M1
to T1
or T2
in Fig. 2
Rs
Cs
Rs: 1 500 Ω±0.1%
Cs: 0.22 μF±1.0%
Rb: 500 Ω±0.1%
10 kΩ ±0.1%
Rb
0.022 μF
±1.0%
Vb
(V)
V
M2
Weighted lekage current=Vb / 500 (A)

Fig. 1

	Performance
Voltmeter (rms reading)	Accuracy: ≤ 2% Input resistance: ≥ 1 MΩ Input capacitance: ≤ 200 pF Frequency range: 15 Hz to 1 MHz

Table 1

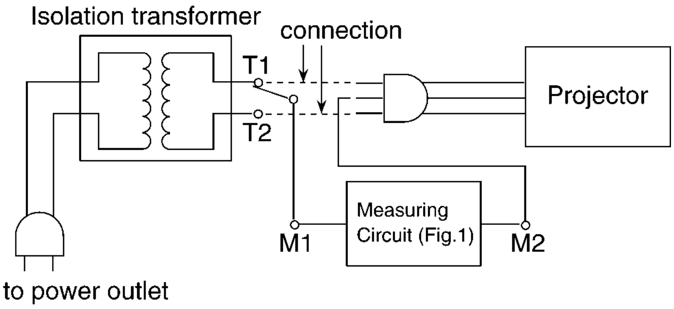

Isolation transformer
connection
T1
T2
Projector
Measuring
Circuit (Fig.1)
M1
M2
to power outlet

Fig. 2

2. Assemble the circuit as shown in Fig. 2. Plug the power cord in a power outlet.
3. Connect M1 to T1 according to Fig. 2 and measure the voltage.
4. Change the connection of M1 from T1 to T2 and measure the voltage again.
5. The voltmeter must read 0.375 V or lower in both of steps 3 and 4. This means that the current must be 0.75 mA or less.
6. If the reading is out of the above standard, the projector must be repaired and rechecked before returning to the customer because of a possibility of an electric shock.

2 Specifications

Model No.	PT-D5500U/E	PT-D5500UL/EL
Power supply	AC 120 V, 50 Hz/60 Hz (PT-D5500U/UL) AC 220 V-240 V, 50 Hz/60 Hz (PT-D5500E/EL)	
Power consumption	770 W (about 10 W in standby without fan running): (PT-D5500U/UL) 750 W (about 15 W in standby without fan running): (PT-D5500E/EL)	
DLP™ panel		
Panel size	0.7 inch (aspect ratio 4:3)	
Display system	DMD™ element, DLP type	
Number of pixels	786 432 pixels (1 024 x 768 dots)	
Lens		Option
Powered zoom	1 to 1.36	
Powered focus control	F=1.7 to 2.0 f=25.6 to 33.8	
Projection lamp	2 bulbs x 300 W UHM lamp	
Optical output	5 000 lm *1	
Applicable scanning frequency		
For video signal (S-video included)	Horizontally 15.73 kHz/15.63 kHz, vertically 59.94 Hz/50 Hz	
For RGB signal	Horizontally 15 kHz-91 kHz, vertically 50 kHz-85 kHz, Panasonic Intelligent Auto Scanning (PIAS) system Dot clock frequency 25 MHz-108 MHz	
For DVI-D signal	VGA−S-XGA Dot clock frequency 25 MHz-108 MHz	
For YPBPRsignal	[480i], horizontally 15.73 kHz, vertically 59.94 Hz [480p], horizontally 31.5 kHz, vertically 59.94 Hz [576i], horizontally 15.63 kHz, vertically 50 Hz [576p], horizontally 31.25 kHz, vertically 50 Hz [720/60p], horizontally 45 kHz, vertically 60 Hz [1035/60i], horizontally 33.75 kHz, vertically 60 Hz [1080/60i], horizontally 33.75 kHz, vertically 60 Hz [1080/50i], horizontally 28.13 kHz, vertically 50 Hz ・HD/SYNC, VD terminals are not compliant with 3 value composite SYNC.	
Color system	7 standards (NTSC/NTSC4.43/PAL/PAN-N/PAL-M/SECAM/PAL60)	
Screen size	50 inchs to 600 inchs	
Screen aspect ratio	4:3	
Projection scheme	Menu-selectable from front/rear/ceiling mount, and floor standing	
Contrast ratio	1 600:1 (when "HIGH" is selected as the "CONTRAST MODE" setting	
Interface ports		
Input module connection slot	One system of input module connection slot	
RGB1 input terminal	1 set, BNC x 5 [For YPBPR input] Y: 1.0 V[p-p] synchronization signal included, PBPR: 0.7 V[p-p] 75 Ω For G-SYNC: 1.0 V[p-p] 75 Ω HD/SYNC: TTL, high-impedance, positive/negative polarity automatically adjusted VD: TTL, high-impedance, positive/negative polarity automatically adjusted ・However, HD/SYNC, and VD terminals are not compliant with 3-value direct SYNC.	

[1] These values are for the lens provided with the PT-D5500U/E. Note that these values change according to the lens used.

Model No.	PT-D5500U/E	PT-D5500UL/EL
Interface ports		
RGB2 input terminal	1 set of high-density, D-sub 15p (female) [For YPBPR input] Y: 1.0 V [p-p] synchronization signal included, PBPR: 0.7 V[p-p] 75 Ω [For RGB input] 0.7 V[p-p] 75 Ω For G-SYNC: 1.0 V[p-p] 75 Ω HD/SYNC: TTL, high-impedance, positive/negative polarity automatically adjusted VD: TTL, high-impedance, positive/negative polarity automatically adjusted ・However, HD/SYNC, and VD terminals are not compliant with 3-value direct SYNC.	
Video input terminal	1 set BNC 1.0 V[p-p] 75 Ω	
S-video input terminal	1 set Mini DIN 4p Y 1.0 V[p-p] C 0.286 V[p-p] 75 Ω Compliant with S1 signals	
Serial input/output terminal	D-sub 9-pin (male/female), RS-232C compliant Used for personal computer control	
Remote1 input/output terminal	1 set each for M3 pin jack Wired remote control, used for link control	
Remote2 terminal	D-sub 9-pin (female) Used for external control	
DVI-D terminal	DVI-D 24-pin	
LAN terminal	RJ-45	
Length of power supply cord	2.5 m (8.2')	
Cabinet	Molded resin	
Outside dimensions	Width: 530 mm (20.8"); Height : 167 mm (6.6"); Depth: 425 mm (16.7")	
Mass	13.7 kg	12.9 kg
Working environment condition	*2 Ambient temperature: 0 to 40°C Ambient humidity: 20 to 80% (no condensation)	
Remote control		
Power source	3 V DC (two AA dry cells)	
Operation range	approx. 7 m/23' (in front of beam receiver)	
Mass	95 g (including dry cells)	
Outside dimensions	Width: 45 mm, Thickness: 23 mm , Depth: 145 mm	
Option		
Hanging attachment (For high ceiling)	: ET-PKD55	
Hanging attachment (For low ceiling)	: ET-PKD55S	
Projection lens	: ET-DLE100, ET-DLE200, ET-DLE300, ET-DLE400, ET-DLE050	
Wireless mouse receiver	: ET-RMRC2	
Replacement lamp unit	: ET-LAD55 (single bulb), ET-LAD55W (double bulbs)	
Long life lamp unit	: ET-LAD55L (single bulb), ET-LAD55LW (double bulbs)	

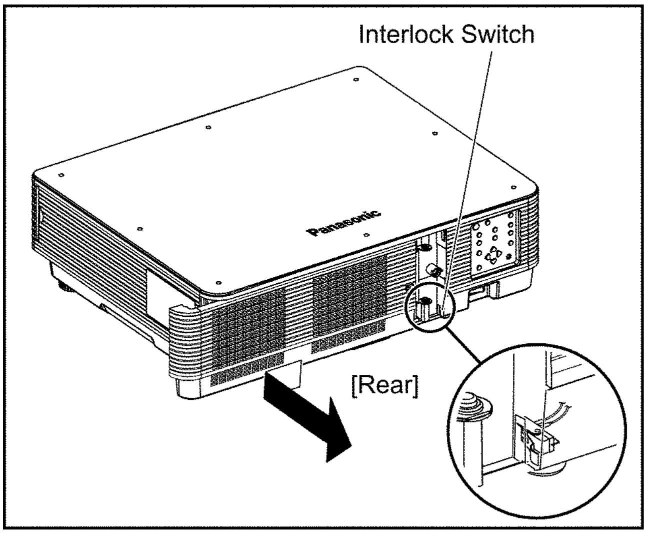
・The outside dimensions do not include the lens and other protruding parts.

*2 When using the projector at high altitudes (1 400 to 2 700 m), the upper limit for the ambient temperature drops by 5 °C.

3 Function for Safety

3.1. Interlock Switch

To ensure safety, the protection circuit of the main unit functions, and this projector becomes operation halt condition (a part of circuit is energizing) when the lamp unit cover is removed or installed incorrectly.

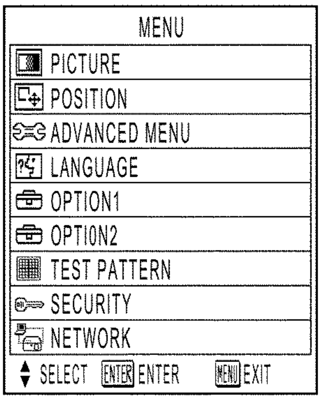

Interlock Switch
Panasonic
[Rear]

4 Serviceman Mode

This projector has Serviceman Mode in addition to standard on-screen menus (User Mode).

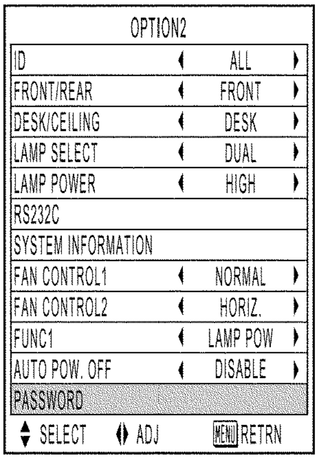
4.1. Setting to Serviceman Mode

(1) Press the MENU button.
The MENU screen will appear.


MENU
PICTURE
POSITION
ADVANCED MENU
LANGUAGE
OPTION1
OPTION2
TEST PATTERN
SECURITY
NETWORK
SELECT
ENTER ENTER
MENU EXIT

(2) Select “OPTION2” using the ▲ or ▼ buttons and press the ENTER button.
The OPTION2 screen will appear.

(3) Select “PASSWORD” using the ▲ or ▼ buttons and press the ENTER button.
The PASSWORD screen will appear.



OPTION2

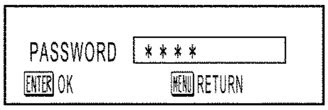
ID	ALL
FRONT/REAR	FRONT
DESK/CEILING	DESK
LAMP SELECT	DUAL
LAMP POWER	HIGH
RS232C	
SYSTEM INFORMATION	
FAN CONTROL1	NORMAL
FAN CONTROL2	HORIZ.
FUNC1	LAMP POW
AUTO POW. OFF	DISABLE
PASSWORD	

SELECT
ADJ
MENU RETRN

(4) Set the operation mode selector (Computer/Numeric, Projector) switch to “Computer/Numeric” on the remote control unit and input the password “1565”.

Note:

· Asterisk (*) will appear for the password numbers.

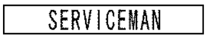


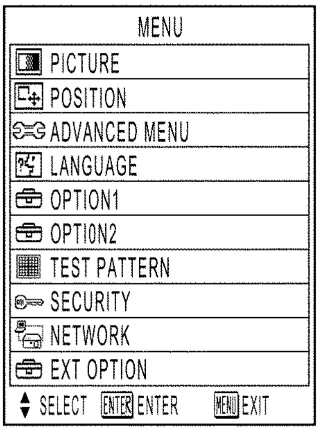
PASSWORD ****

ENTER OK
MENU RETURN

(5) Set the operation mode selector (Computer/Numeric, Projector) switch to “Projector” on the remote control unit and press the ENTER button.

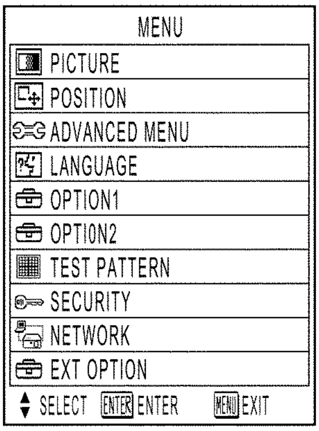
(6) Press the MENU button.
Note:
- "SERVICEMAN" will appear.


SERVICEMAN

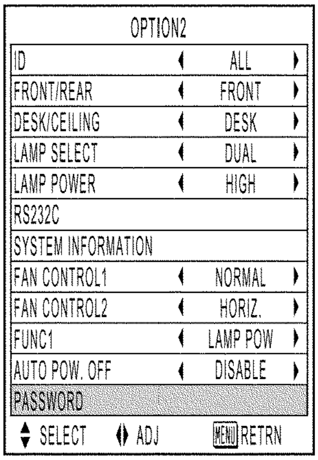

MENU
PICTURE
POSITION
ADVANCED MENU
LANGUAGE
OPTION1
OPTION2
TEST PATTERN
SECURITY
NETWORK
EXT OPTION
SELECT
ENTER ENTER
MENU EXIT

4.2. Resetting to User Mode

(1) Press the MENU button.
The MENU screen will appear.

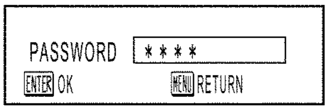

MENU
PICTURE
POSITION
ADVANCED MENU
LANGUAGE
OPTION1
OPTION2
TEST PATTERN
SECURITY
NETWORK
EXT OPTION
SELECT
ENTER ENTER
MENU EXIT

(2) Select “OPTION2” using the ▲ or ▼ buttons and press the ENTER button.
The OPTION2 screen will appear.


OPTION2
ID ◀ ALL ▶
FRONT/REAR ◀ FRONT ▶
DESK/CEILING ◀ DESK ▶
LAMP SELECT ◀ DUAL ▶
LAMP POWER ◀ HIGH ▶
RS232C
SYSTEM INFORMATION
FAN CONTROL1 ◀ NORMAL ▶
FAN CONTROL2 ◀ HORIZ. ▶
FUNC1 ◀ LAMP POW ▶
AUTO POW. OFF ◀ DISABLE ▶
PASSWORD
SELECT
ADJ
MENU RETRN

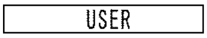
(3) Select PASSWORD using the ▲ or ▼ buttons and press the ENTER button.
The PASSWORD screen will appear.

(4) Set the operation mode selector (Computer/Numeric, Projector) switch to "Computer/Numeric" on the remote control unit and input the password "0000".
Note:
- Asterisk (*) will appear for the password numbers.


PASSWORD ****
ENTER OK
MENU RETURN

(5) Set the operation mode selector (Computer/Numeric, Projector) switch to "Projector" on the remote control unit and press the ENTER button.

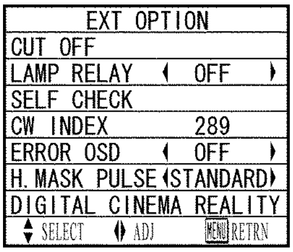
(6) Press the MENU button.
Note:
- "USER" will appear.



4.3. Functions in Serviceman Mode

4.3.1. EXT OPTION

"EXT OPTION" is added to the MENU.



EXT OPTION
CUT OFF
LAMP RELAY ◀ OFF ▶
SELF CHECK
CW INDEX 289
ERROR OSD ◀ OFF ▶
H.MASK PULSE ◀STANDARD▶
DIGITAL CINEMA REALITY

1. CUT OFF

   Sets the display ON/OFF for each color (R, G, B).

2. LAMP RELAY

   "OFF", "4h", "5h", "6h" . . . "10h", "11h", "12h":

   If "SINGLE" is set on LAMP SELECT, Lamp Unit 1 and Lamp Unit 2 are automatically switched alternately at intervals of the selected setting time (for 4-12 hours).

3. SELF CHECK

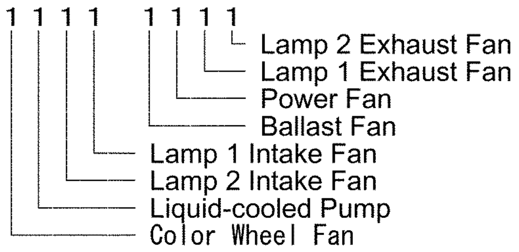
   Displays SELF CHECK.

   There are 3 pages, and it is switched with ◀ and ▶ buttons.

[1st page]

SELF CHECK 1/3

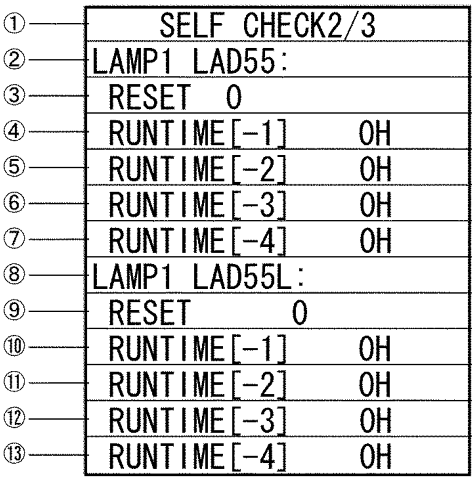
```
①      SELF CHECK1/3
②  MAIN:     R0.42.00
③  FPGA:     R0.77
④  NETWORK:  R0.77
⑤  1080/60i
⑥  H 33.61kHz
⑦  V 59.93Hz
⑧  OK AIR TEMP.027
⑨  OK DMD TEMP.041
⑩  OK LAMP1 0000H00M ON   ⑮
⑪  NG LAMP2 0010H00M ON   ⑯
⑫  OK FAN    1111 1111    ⑰
⑬  OK COLOR WHEEL
⑭  OK DIRECT POWER OFF
```

	Display Contents	Remarks
①	Page No.	
②	Main CPU Version Display	
③	FPGA Version Display	
④	Network CPU Version Display	
⑤	Signal Discrimination: Signal Name	Displays DDP version when no signal is inputted.
⑥	Horizontal Frequency	
⑦	Vertical Frequency	
⑧	Intake Air Temperature	Celsius display
⑨	DMD Temperature	Celsius display
⑩	Lamp Unit 1 Abnormality Check	OK: Normal NG: Lighting failure
⑪	Lamp Unit 2 Abnormality Check	
⑫	Fan Abnormality Check	OK: Normal NG: Stop
⑬	Color Wheel Abnormality Check	OK: Normal NG: Stop
⑭	Direct Power-off Circuit Abnormality Check	OK: Normal NG: Circuit unconnection
⑮	Lamp Unit 1 Cumulative Usage Time State of Lighting	Cumulative usage time: Conversion time
⑯	Lamp Unit 2 Cumulative Usage Time State of Lighting	ON: Lighting OFF: Turning off
⑰	Fan Individual Abnormality Check 	1: Normal 0: Stop

1 1 1 1 1 1 1 1
Lamp 2 Exhaust Fan
Lamp 1 Exhaust Fan
Power Fan
Ballast Fan
Lamp 1 Intake Fan
Lamp 2 Intake Fan
Liquid-cooled Pump
Color Wheel Fan

[2nd page]

SELF CHECK 2/3

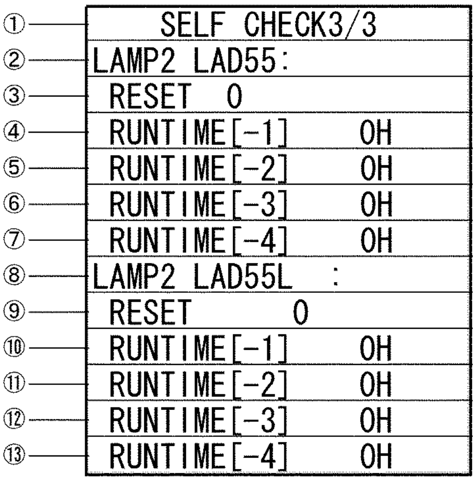


```
      SELF CHECK2/3
LAMP1 LAD55:
 RESET  0
 RUNTIME[-1]     0H
 RUNTIME[-2]     0H
 RUNTIME[-3]     0H
 RUNTIME[-4]     0H
LAMP1 LAD55L:
 RESET      0
 RUNTIME[-1]     0H
 RUNTIME[-2]     0H
 RUNTIME[-3]     0H
 RUNTIME[-4]     0H
```

	Display Contents	Remarks
①	Page No.	
②	Lamp Unit 1 Normal Lamp Cumulative Usage Time	
③		Reset Times
④		One time of reset
⑤		Two times of reset
⑥		Three times of reset
⑦		Four times of reset
⑧	Lamp Unit 1 Long Life Lamp Cumulative Usage Time	
⑨		Reset Times
⑩		One time of reset
⑪		Two times of reset
⑫		Three times of reset
⑬		Four times of reset

[3rd page]

SELF CHECK 3/3



```
      SELF CHECK3/3
LAMP2 LAD55:
 RESET  0
 RUNTIME[-1]     0H
 RUNTIME[-2]     0H
 RUNTIME[-3]     0H
 RUNTIME[-4]     0H
LAMP2 LAD55L  :
 RESET      0
 RUNTIME[-1]     0H
 RUNTIME[-2]     0H
 RUNTIME[-3]     0H
 RUNTIME[-4]     0H
```

	Display Contents	Remarks
①	Page No.	
②	Lamp Unit 2 Normal Lamp Cumulative Usage Time	
③		Reset Times
④		One time of reset
⑤		Two times of reset
⑥		Three times of reset
⑦		Four times of reset
⑧	Lamp Unit 2 Long Life Lamp Cumulative Usage Time	
⑨		Reset Times
⑩		One time of reset
⑪		Two times of reset
⑫		Three times of reset
⑬		Four times of reset

4. CW INDEX

When the color wheel is replaced, adjusts it with ◀ and ▶ buttons.

a. Decrease CW INDEX setting value from the default value (289) by 50, and set it to 239.

A blue-purple color mixture appears in the upper right or the upper of the screen. (When CEILING setting, appears it in the lower left or the lower of the screen.)

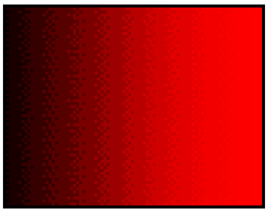
b. Increase CW INDEX setting value by 1, and record the value where the color mixture disappears. (The recorded value is assumed to "A".)

c. Increase CW INDEX setting value from the default value (289) by 50, and set it to 339.

A yellow-green color mixture appears in the lower right or the lower of the screen. (When CEILING setting, appears it in the upper left or the upper of the screen.)

d. Decrease CW INDEX setting value by 1, and record the value where the color mixture disappears. (The recorded value is assumed to "B".)

e. Set the mean value (omission below decimal point) of "A" and "B" to the CW INDEX setting value.



5. ERROR OSD

Displays the lamp status with OSD when you do not see the status LED lights because the rear projection, etc.

OSD	OFF		ON	
ERROR OSD	OFF	ON	OFF	ON
To the shutdown within 200 hours	No OSD display		"REPLACE LAMP" is displayed for 30 seconds or until any key is pressed.	
Excess to the shutdown time	No OSD display		"REPLACE LAMP" is displayed until any key is pressed.	
Lighting failure	No OSD display		No OSD display	"LAMP1 ERROR" or "LAMP2 ERROR" is displayed until any key is pressed.
Lamp burn-out	No OSD display		No OSD display	"LAMP1 ERROR" or "LAMP2 ERROR" is displayed until any key is pressed.

6. H.MASK PULSE

When the signal of 480i or 576i is inputted, the synchronization might become unstable. It might be stable when H.MASK PULSE is set to "SPECIAL".

- STANDARD: Does not execute special signal processing.
- SPECIAL: Executes special signal processing.

7. DIGITAL CINEMA REALITY

When VIDEO, S-VIDEO or 480i signal is inputted, can improve the vertical resolution further.

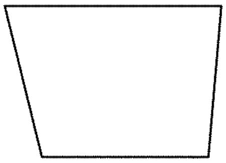
- OFF: Does not execute DIGITAL CINEMA REALITY processing.
- ON: Detects the signal automatically, and executes DIGITAL CINEMA REALITY processing.

4.3.2. SUB-KEYSTONE

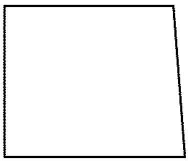
"SUB-KEYSTONE" is added to KEYSTONE in the "POSITION" menu.

If KEYSTONE and "Lens shift" are used at the same time, the right and left may be corrected in the unbalance.

At this time, only the right side can be corrected by SUB-KEYSTONE.



1. The left side is adjusted straight by KEYSTONE.



2. The right side is adjusted straight by SUB-KEYSTONE.

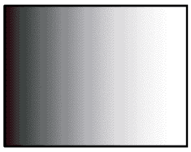
Note:

- SUB-KEYSTONE is a supplementary adjustment function and there is no guaranty of completely functioning. Use it within the range where the trouble such as deforming the shape of the image does not occur.

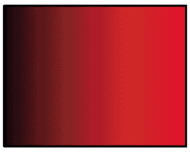
4.3.3. Test Pattern Addition

"Gradation", "Red gradation", "Whole red", "Whole green" and "Whole blue" patterns are added to the test pattern.

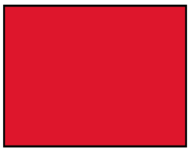
"Red gradation" is used for CW INDEX adjustment.



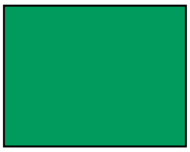
Gradation



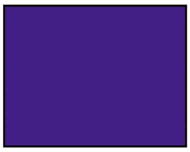
Red gradation



Whole red



Whole green

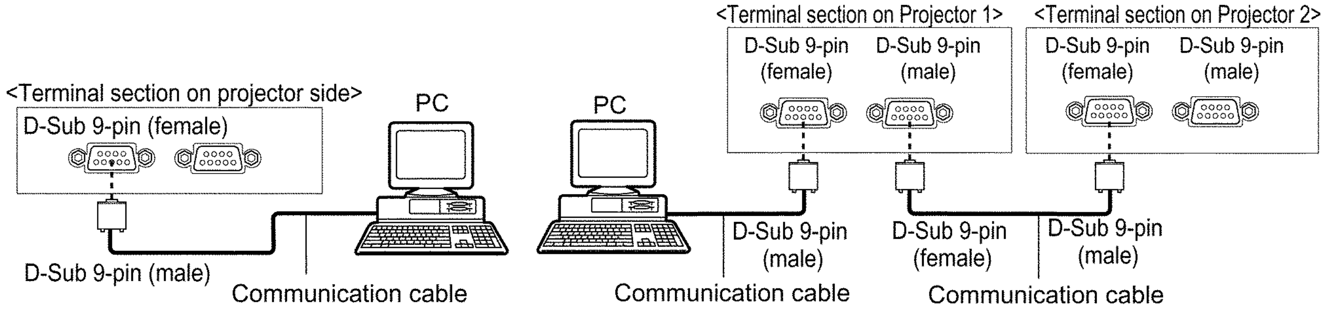


Whole blue

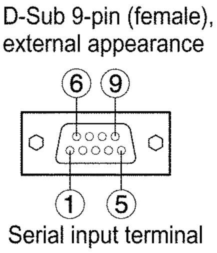
5 Using the Serial Terminals

SERIAL terminals which are on the side-mounted connection terminals conform to RS-232C standard. This projector can be controlled by a PC which is connected as shown below. Also SERIAL OUT terminal is provided to enable plural projector control.

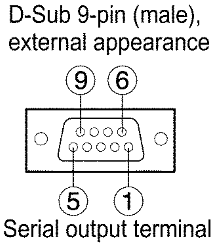
5.1. Examples of Connection


<Terminal section on projector side>
D-Sub 9-pin (female)
D-Sub 9-pin (male)
Communication cable
PC
PC
<Terminal section on Projector 1>
D-Sub 9-pin (female)
D-Sub 9-pin (male)
<Terminal section on Projector 2>
D-Sub 9-pin (female)
D-Sub 9-pin (male)
D-Sub 9-pin (male)
Communication cable
D-Sub 9-pin (female)
D-Sub 9-pin (male)
Communication cable

5.2. Pin Assignments and Signal Names


D-Sub 9-pin (female), external appearance
⑥ ⑨
① ⑤
Serial input terminal

Pin No.	Signal name	Description
①		NC
②	TXD	Send data
③	RXD	Receive data
④		Connected internally
⑤	GND	Ground
⑥		NC
⑦	CTS	Connected internally
⑧	RTS	
⑨		NC


D-Sub 9-pin (male), external appearance
⑨ ⑥
⑤ ①
Serial output terminal

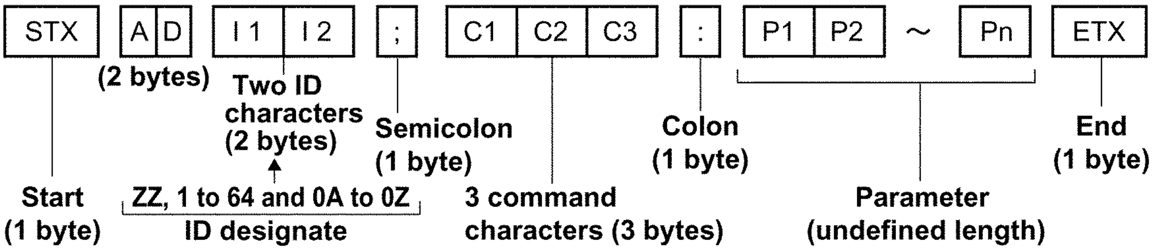
Pin No.	Signal name	Description
①		NC
②	RXD	Receive data
③	TXD	Send data
④		NC
⑤	GND	Ground
⑥		NC
⑦	RTS	Connected internally
⑧	CTS	
⑨		NC

5.3. Communication Conditions (Factory Setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	9 600bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

5.4. Basic Format

Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.


STX
A
D
I 1
I 2
;
C1
C2
C3
:
P1
P2
~
Pn
ETX
(2 bytes)
Two ID characters (2 bytes)
Semicolon (1 byte)
Colon (1 byte)
End (1 byte)
Start (1 byte)
ZZ, 1 to 64 and 0A to 0Z
ID designate
3 command characters (3 bytes)
Parameter (undefined length)

Attention

- No command can be sent or received for 10 to 60 seconds after the lamp starts lighting. Try sending any command after that period has elapsed.
- When sending several commands, be sure to wait for a response from the projector before sending the next command. When sending commands without parameters, a colon (:) is not necessary.

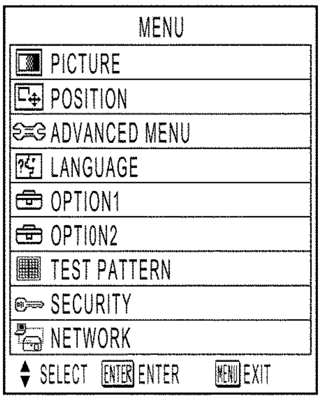
Note

- If a wrong command parameter is sent, the projector will send an "ER401" or "ER402" command to the computer.
- A projector ID supported on the RS-232C interface is ZZ (ALL) and a group of 1 to 64 and 0A to 0Z.
- If a command is sent with a projector ID specified, the projector will respond to the computer only in the following cases:
  If it coincides with the projector ID,
  ID specification is ALL and VPS-SYSTEM is the master, or
  ID specification is group and Group is the master.

5.5. Procedure of Communication Condition Settings

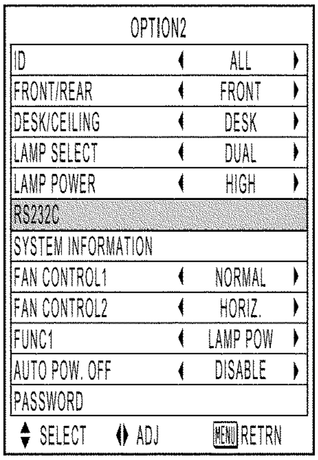
(1) Press the MENU button.
The MAIN MENU screen will be displayed.

(2) Press the ▲ and ▼ buttons to select “OPTION2”.



(3) Press the ENTER button.

(4) Press the ▲ and ▼ buttons to select “RS232C”.


OPTION2

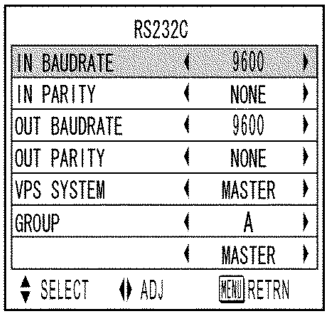
ID	ALL
FRONT/REAR	FRONT
DESK/CEILING	DESK
LAMP SELECT	DUAL
LAMP POWER	HIGH
RS232C	
SYSTEM INFORMATION	
FAN CONTROL1	NORMAL
FAN CONTROL2	HORIZ.
FUNC1	LAMP POW
AUTO POW. OFF	DISABLE
PASSWORD	

(5) Press the ENTER button.
The RS232C screen will be displayed.

(6) Press the ▲ and ▼ buttons to select communication conditions.

(7) Press the ◀ and ▶ buttons to confirm the setting..

(8) Press the MENU button three times.
The on-screen indications disappear, and the system returns to the normal screen.


RS232C

IN BAUDRATE	9600
IN PARITY	NONE
OUT BAUDRATE	9600
OUT PARITY	NONE
VPS SYSTEM	MASTER
GROUP	A
	MASTER

5.6. Control commands

5.6.1. Input Commands

Items	Commands:Parameters	Functions	Callback	Remarks
POWER	PON	POWER ON	PON	Calls back PON even if REMOTE2 is effective.
	POF	STAND-BY	POF	Calls back PON even if REMOTE2 is effective.
FREEZE	OFZ:0	FREEZE key	OFZ:0	
	OFZ:1	0=OFF 1=ON	OFZ:1	
MENU	OMN	MENU key	OMN	
ENTER	OEN	ENTER key	OEN	
CURSOR	OCU	UP key	OCU	
	OCD	DOWN key	OCD	
	OCL	LEFT key	OCL	
	OCR	RIGHT key	OCR	
STANDARD	OST	STANDARD key	OST	
AUTO SETUP	OAS	AUTO SETUP execution	OAS	
SHUTTER	OSH:0	SHUTTER key	OSH:0	Calls back ER402 when SHUTTER of REMOTE2 is ON.
	OSH:1	0=OFF 1=ON	OSH:1	Calls back ER402 when SHUTTER of REMOTE2 is OFF.
INPUT SELECT	IIS:RG1	RGB1	IIS:RG1	Calls back ER402 if the input switch of REMOTE2 is available.
	IIS:RG2	RGB2	IIS:RG2	
	IIS:VID	VIDEO	IIS:VID	
	IIS:SVD	S-VIDEO	IIS:SVD	
	IIS:DVI	DVI	IIS:DVI	
FUNCTION1	FC1	FUNCTION execution	FC1	
TEST	OTS:p1p2	Test pattern selection	OTS:p1p2	
		00=OFF 01=Whole white 02=Whole black 03=Flag 05=1% window 06=1% window inversion 07=Focus 08=Colorbar 09=Gradation 10=16:9 22=Whole red 23=Whole green 24=Whole blue 41=Red gradation		
ON SCREEN	OOS:0	OSD selection	OOS:0	
	OOS:1	0= OSD OFF 1=OSD ON	OOS:1	
NUMBER KEY	ONK:0	NUMBER key 0	ONK:0	
	ONK:1	NUMBER key 1	ONK:1	
	ONK:2	NUMBER key 2	ONK:2	
	ONK:3	NUMBER key 3	ONK:3	
	ONK:4	NUMBER key 4	ONK:4	
	ONK:5	NUMBER key 5	ONK:5	
	ONK:6	NUMBER key 6	ONK:6	
	ONK:7	NUMBER key 7	ONK:7	
	ONK:8	NUMBER key 8	ONK:8	
	ONK:9	NUMBER key 9	ONK:9	
SYSTEM SEL	OSL	SYSTEM SELECTER key	OSL	

5.6.2. Data setting Commands

Items	Commands:Parameters	Functions	Callback	Remarks
INSTALLATION	OIL:0	Front/Floor	OIL:0	
	OIL:1	Rear/Floor	OIL:1	
	OIL:2	Front/Ceiling	OIL:2	
	OIL:3	Rear/Ceiling	OIL:3	
LAMP SELECT	LPM:0	Lamp selection	LPM:0	*1
	LPM:1	0=DUAL 1=SINGLE	LPM:1	
	LPM:2	2=LAMP1 3=LAMP2	LPM:2	
	LPM:3		LPM:3	
LAMP POWER	OLP:0	LAMP POWER setting	OLP:0	
	OLP:1	0=HIGH 1=LOW	OLP:1	Calls back ER402 when using a long life lamp.
USER MEMORY	OCS:p1p2	USER MEMORY switching	OCS:p1p2	p1p2:00,01,02,03 Sets 00 when the user memory is not used. *2
ENTRY USER MEMORY	OES	Enters current receiving signal in the user memory.	OES:p1p2	
DELETE USER MEMORY	ODS:p1p2	Deletes data in the specified user memory.	ODS:p1p2	p1p2:01,02,03 *2
SET DATE	TSD:y1y2y3y4 m1m2d1d2w	Date setting	TSD:y1y2y3y4m1m2d1d2w	y1y2y3y4m1m2d1d2 + a day of the week (Mon.=1 Tues.=2 --- Sun.=7) *3
SET TIME	TST:h1h2m1m2s1s2	Time setting	TST:h1h2m1m2s1s2	*3

*1 In the SINGLE mode, one of lamp 1 and lamp 2 whose remainder time is longer is turned ON.

*2 The input of p1p2 accepts any of the types +1, +01, 1 and 01.

*3 Displays of SET DATE and SET TIME are set by UTC (Coordinated Universal Time).

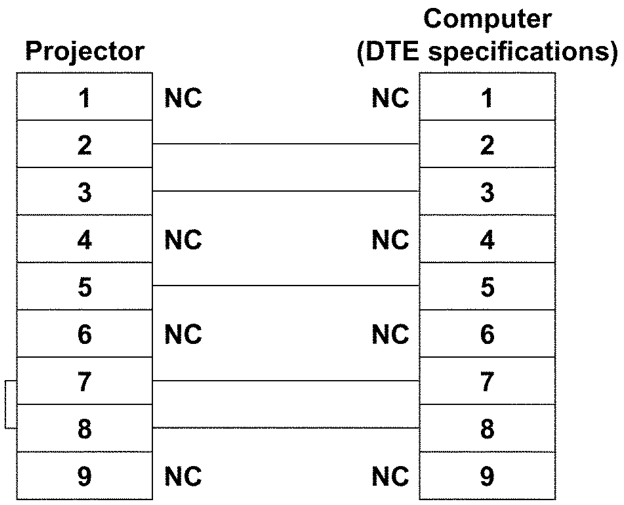
5.6.3. Inquiry Commands

Items	Commands:Parameters	Functions	Callback	Interpretation	Remarks
POWER CONDITION	QPW	Inquiry about POWER CONDITION	000	OFF	Available in STANDBY
			001	ON	
FREEZE	QFZ	Inquiry about FREEZE	0	OFF	
			1	ON	
SHUTTER	QSH	Inquiry about SHUTTER	0	OFF	
			1	ON	
INPUT SIGNAL	QIN	Inquiry about INPUT SIGNAL	RG1	RGB1	
			RG2	RGB2	
			VID	VIDEO	
			SVD	S-VIDEO	
			AUX	AUX	
TEST	QTS	Inquiry about test pattern	p1p2		
ON SCREEN	QOS	Inquiry about OSD	0	off	
			1	on	
PICTURE MODE	QPM	Inquiry about PICTURE MODE	NAT	NATURAL	
			STD	STANDARD	
			DYN	DYNAMIC	
			CIN	CINEMA	
			GRA	GRAPHIC	
COLOR	QVC	Inquiry about COLOR	p1p2p3		
TINT	QVT	Inquiry about TINT	p1p2p3		
COLOR TEMP.	QTE	Inquiry about COLOR TEMP.	1	MIDDLE	
			2	HIGH	
			4	USER	
			10	DEFAULT	
WHITE BALANCE LOW(R)	QOR	Inquiry about WHITE BALANCE LOW (R)	p1p2p3		
WHITE BALANCE LOW(G)	QOG	Inquiry about WHITE BALANCE LOW (G)	p1p2p3		
WHITE BALANCE LOW(B)	QOB	Inquiry about WHITE BALANCE LOW (B)	p1p2p3		
WHITE BALANCE HI(R)	QHR	Inquiry about WHITE BALANCE HIGH (R)	p1p2p3		
WHITE BALANCE HI(G)	QHG	Inquiry about WHITE BALANCE HIGH (G)	p1p2p3		
WHITE BALANCE HI(B)	QHB	Inquiry about WHITE BALANCE HIGH (B)	p1p2p3		
CONTRAST	QVR	Inquiry about CONTARST	p1p2p3		
BRIGHTNESS	QVB	Inquiry about BRIGHTNESS	p1p2p3		
SHARPNESS	QVS	Inquiry about SHARPNESS	p1p2p3		
NOISE REDUCTION	QNS	Inquiry about NR	0	OFF	
			1	ON	
AI	QAI	Inquiry about AI settings	0	OFF	
			1	ON	
TV-SYSTEM	QSG	Inquiry about TV-SYSTEM	AT1	AUTO1	
			AT2	AUTO2	
			NTS	NTSC	
			N44	NTSC4.43	
			PAL	PAL	
			PAN	N-PAL	
			PAM	M-PAL	
			SEC	SECAM	
			P60	PAL60	
			BW5	Black and white 50	
			BW6	Black and white 60	
SHIFT H	QTH	Inquiry about horizontal shift	p1p2p3p4		
SHIFT V	QTV	Inquiry about vertical shift	p1p2p3p4		
SIZE	QSE	Inquiry about SIZE	0	AUTO	
			1	4:3	
			2	16:9	
			3	S4:3	
ZOOM(H)	QZH	Inquiry about ZOOM (H)	p1p2p3		
ZOOM(V)	QZV	Inquiry about ZOOM (V)	p1p2p3		
CLOCK PHASE	QCP	Inquiry about CLOCK PHASE	p1p2p3		
TOTAL DOTS	QTD	Total dots	p1p2p3p4		

Items	Commands:Parameters	Functions	Callback	Interpretation	Remarks
DISPLAY DOTS	QDD	Display dots	p1p2p3p4		
TOTAL LINES	QTL	Total lines	p1p2p3p4		
DISPLAY LINES	QDL	Display lines	p1p2p3p4		
CLAMP POSITION	QLT	Inquiry about ClAMP POSITION	p1p2p3		
KEYSTONE	QKS	Inquiry about KEYSTONE	p1p2p3		
LINEARITY	QLI	Inquiry about LINEARITY	p1p2p3		
LANGUAGE	QLG	Inquiry about LANGUAGE	ENG	English	
			DEU	German	
			FRA	French	
			ESP	Spanish	
			ITL	Italian	
			JPN	Japanese	
			CHI	Chinese	
			RUS	Russian	
			KOR	Korean	
INSTALLATION	QSP	Inquiry about INSTALLATION	0	Front/Floor	
			1	Rear/Floor	
			2	Front/Ceiling	
			3	Rear/Ceiling	
SET RUNTIME	QST	Inquiry about projector runtime	p1p2p3p4p5	00000h - 99999h	
LAMP ON TIME (LAMP TIMER)	Q$L:p1 (p1=1or2)	Inquiry about LAMP ON TIME (1=LAMP1, 2=LAMP2) Conversion time for HIGH of recognized lamp	p1p2p3p4	0000h - 9999h	
LAMP SELECT	QSL	Inquiry about LAMP SELECT Calls back the set content. (Even if the callback is DUAL, it does not necessarily light without fail with both lamps.)	0	DUAL	
			1	SINGLE	
			2	LAMP1	
			3	LAMP2	
LAMP POWER	QLP	Inquiry about LAMP POWER	0	HIGH(300 W)	
			1	LOW(240 W)	
			2	Long life lamp (160 W)	
VPS SYSTEM	QVY	Inquiry about VPS SYSTEM	0	SLAVE	
			1	MASTER	
GROUP GET	ADa1a2;QRG	Inquiry about GROUP information	ADa1a2;RGSg1g2		
MASTER GET	ADg1g2;QRL	Inquiry about MASTER information	ADa1a2;RLSa1a2		
TEMP	QTM:p1	Inquiry about TEMP	p1p2p3p4/p5p6p7p8 (Celsius/Fahrenheit)	p1=0 intake	
				p1=2 DMD	
FAN CONTROL	QFM	Inquiry about FAN CONTROL	0	NORMAL	
			1	HIGHLAND	
FUNCTION1	QFC	Inquiry about FUNCTION1	1	LAMP POWER	
			2	SIZE	
USER MEMORY	QSB	Inquiry about USER MEMORY	p1p2		p1p2 : 01,02,03 (ER401 when it is not used)
GET DATE	QGD	Inquiry about the system date	y1y2y3y4m1m2d1d2w	yyyymmdd (a day of the week)	Day of the week: Mon.=1, Tues.=2, . . . Sun.=7
GET TIME	QGT	Inquiry about the system time	h1h2m1m2s1s2	hhmmss	UTC
GET SYSTEM STATUS	Q$S	Inquiry about the lamp status	0	Lamp off	
			1	In turning on	
			2	Lamp on	
			3	In turning off (cooling)	

5.7. Cable specifications

<Connecting to a PC>


Projector
Computer
(DTE specifications)
1 NC
NC 1
2
2
3
3
4 NC
NC 4
5
5
6 NC
NC 6
7
7
8
8
9 NC
NC 9

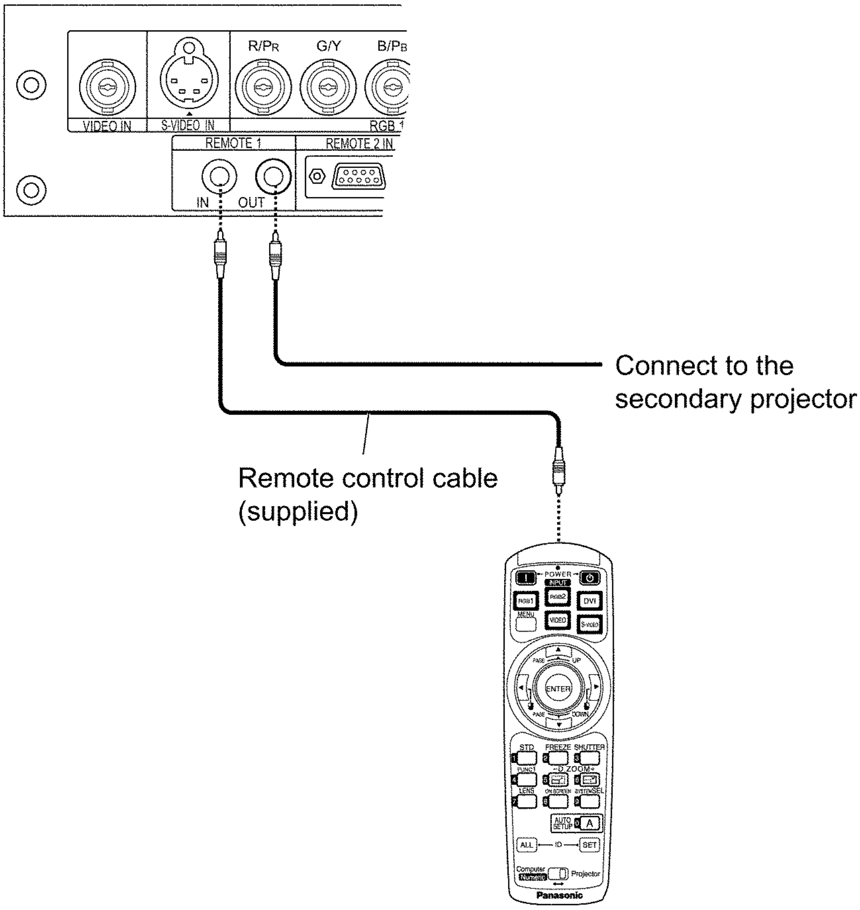
Note

To connect the computer to the SERIAL terminal, prepare an adequate communication cable that fits to your personal computer.

6 Using a Wired Remote Control

6.1. Connection Example

When two or more projectors are connected in the system, connect the projectors with the supplied remote control cable to simultaneously control the projectors with a remote control unit through the REMOTE1 IN/OUT terminal. It is effective to use the wired remote control in the environment in which an obstacle stands in the light path or where the system is susceptible to outside light.



Connect to the secondary projector

Remote control cable (supplied)

6.2. Setting the Projector ID Number for Remote Control

Every projector has its ID number and the ID number of the controlling projector must be set to the remote control in advance so that the user can operate the remote control. The ID number of the projector is set to “ALL” on shipping, and use the ID ALL button of the remote control when using only a single projector.

Procedure of ID setting

1. Change the position of the operation mode selector awitch to “Computer”.
2. Press the ID SET button, and within five seconds use the number (0 to 9) buttons to enter the 2-digit ID number set by the projector.
3. Change the position of the operation mode selector switch to “Projector”.

   However, if the ID ALL button is pressed, the projector can be controlled regardless of the ID number of the projector (simultaneous control mode).

   - Do not press the ID SET button accidentally or carelessly because the ID number on the remote control can be set even when no projector is around.

     If the ID SET button is pressed, the ID number goes back to the one set before pressing the ID SET button unless a numeric button is pressed within five seconds after the ID SET button is pressed.
   - Your specified ID number is stored in the remote control unit unless another one is specified later. However, the stored ID will be erased if the batteries of the remote control are left exhausted. When the dry cells are replaced, set the same ID number again.

7 Support for Service

7.1. Supporting Methods

We will support according to the following methods.

Supporting methods	Applied parts
Replaced by module or block	FM-Module (For specified components, supplies them discretely.)
	Ballast module
	Power module
Replaced by discrete components	Other components
Replacd at the manufacturing department	Optical block unit (including DMD™ block) , DMD™ drive module, Assembly parts

7.2. Note for Replacement of P.C.Boards

7.2.1. When replacing the A-P.C.Board

- Transfer the data of the original A-P.C.Board to the new A-P.C.Board using the adjustment software and a personal computer. (If you cannot transfer the data, remove IC2508 and IC2509 from the original board and mount them on the new board.)

  * For the adjustment software, consult an authorized service center.

7.3. Replacement of the lithium battery on the A-P.C.Board

If the lithium battery will be empty, replace it with a new one (CR2032 or equivalent).

Cautions

- Explosion may occur if replacing the battery with an incorrect one.
- Dispose of used batteries according to the instructions.

8 Cautions for Service

8.1. Servicing Methods

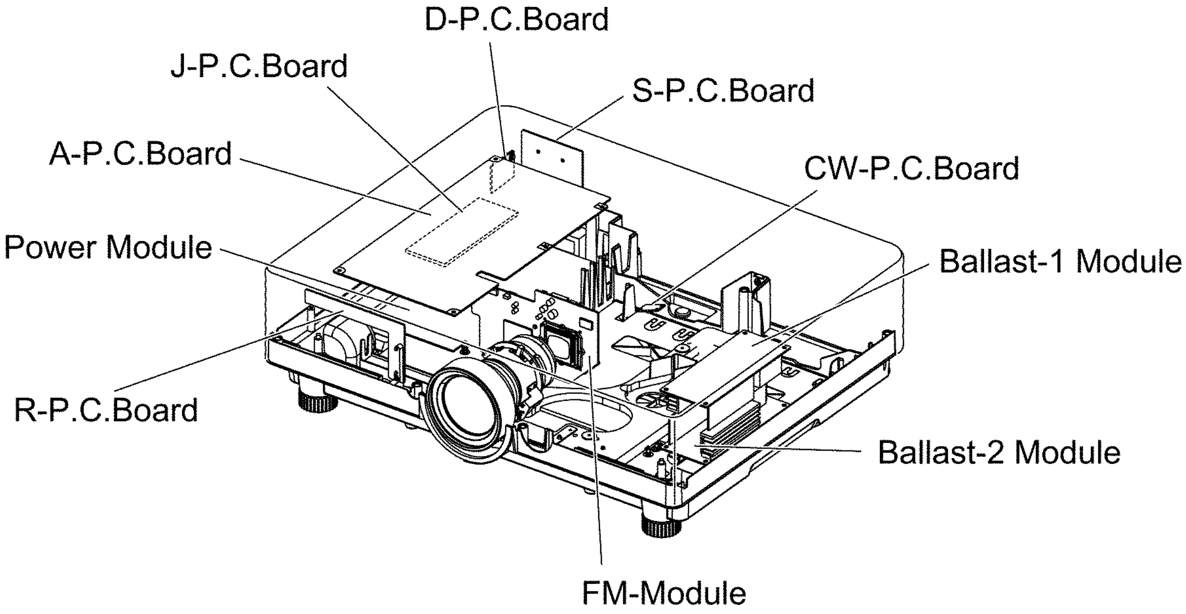
- Never unplug the power cord from the outlet, open the circuit breaker, or perform other procedures to cut off the power line during the operation of any cooling fan.
- Be sure to unplug the power cord from the power outlet before servicing.

Powering off the projector

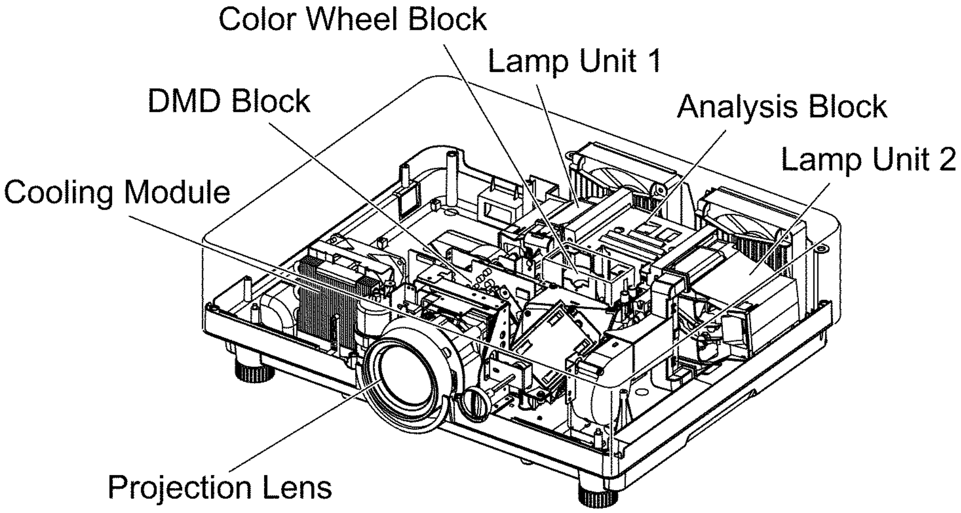
1. Press the POWER OFF " ⏻ " button.
2. Select "Execute" with ◀ or ▶ button and press the ENTER button.(or press the POWER OFF " ⏻ " button again.)
   The projection of the image stops, and POWER indicator of the main unit lights up orange. (Cooling fans keep running.)
3. Wait until the POWER indicator turns to red (i.e., until the cooling fans stop).
4. Press the " ○ " marked side of the MAIN POWER switch to turn off the projector.

9 Parts Location

9.1. Electrical Parts Location


D-P.C.Board
J-P.C.Board
S-P.C.Board
A-P.C.Board
CW-P.C.Board
Power Module
Ballast-1 Module
R-P.C.Board
Ballast-2 Module
FM-Module

9.2. Electromechanical Parts Location


Color Wheel Block
Lamp Unit 1
DMD Block
Analysis Block
Lamp Unit 2
Cooling Module
Projection Lens

10 Replacement of Lamp Unit

Cautions

- Wait until the lamp is cooled sufficiently before replacing the lamp unit.

10.1. Precautions on Lamp Unit Replacement

- Be careful when handling a light source lamp . The lamp may burst if it hit by solid objects or if it is dropped because of high air pressure inside the bulb.
- A used lamp unit may burst if it is handled violently.
  For disposition of used lamps, request an industrial waste disposal contractor.
- Do not reset the cumulative time, except when the lamp unit has been replaced with a new unit.
- If you continue to use a lamp after the replacement time, the lamp may break.
- Philips screwdriver is necessary when replacing a lamp unit.
  Take care not to slip your hand when using a screwdriver.
- A lamp unit is an optional part. Contact the dealer.
  Replacement lamp unit model No.: ET-LAD55 (single bulb), ET-LAD55W (double bulbs)
  Rating: 300 W

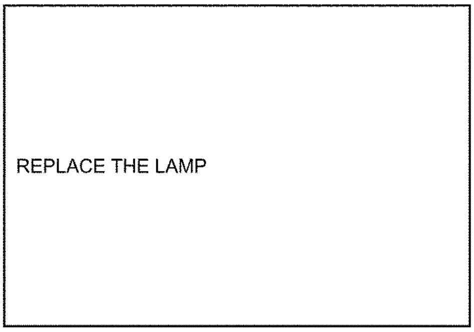
  Long-life lamp unit model No.: ET-LAD55L (single bulb), ET-LAD55LW (double bulbs)
  Rating: 160 W
- Other lamps than specified above cannot be used. Be sure to use the specified lamp.

10.2. Timing of Lamp Unit Replacement

The lamp used for the light source has its due life. The life of light source lamp used in the main unit is 1 500 hours[*1] (when lamp power is HIGH and lamp selection is DUAL). However, it may happen that the lamp becomes dead (will not light) by the time of 1 500 hours[*1] depending on the characteristics of individual lamps and working conditions (lamps may reduce their life affected by the times of lighting and the intervals between previous lighting and next lighting). Therefore, it is strongly recommended for the user to keep a spare bulb. If your lamp unit is not replaced after 1 300 hours[*2] (with the lamp power set at “HIGH”), power supply will be turned off automatically at the time of 1 500 hours[*1] of initial lighting, power supply is turned off automatically about 10 minutes later, entering a standby state even if it is turned on again.

- **Indication after 1300 hours[*2]**
  (with the lamp power set at "HIGH")

  When lamp unit used hours have reached 1 300 hours[*2], lamp monitor (LAMP 1 or LAMP 2) lights up including standby state. Further, an on-screen indication will appear for about 30 seconds as shown in the diagram on the right, recommending replacement of lamp unit. (The indication on the below diagram will disappear after about 30 seconds or when either control button on the rear of main unit or remote control button is operated.)
  After the time of 1500 hours[*1], the on-screen indication will not disappear unless the menu (MENU) button is operated.


REPLACE THE LAMP

[*1] This time period is 4 000 hours when long-life lamps are used.
[*2] This time period is 3 800 hours when long-life lamps are used.

10.3. Indication of Lamp Monitor

Name of monitor lamp	Lamp indication	Information	Checkpoint	Remedial measure
Lamp monitor **LAMP1** ◎ **LAMP2** ◎	Lighting in red	Indicates the time for replacing the lamp unit.	· Did you notice a "REPLACE THE LAMP" message on the screen when turning on the projector power supply.	· This lamp monitor lights up when the lamp unit used hours have reached 1 300 hours (3 800 hours when long-life lamps are used). Request the dealer to replace the lamp unit.
	Blinking in red (3 times)	Error is detected in the lamp circuit.	· Did you turn the power back on immediately after turning it off?	· Wait until the lamp has cooled off, and then turn on the power.
			· Some error has arisen in the lamp circuit. · Check for fluctuation (or drop) in the source voltage.	· Turn off the MAIN POWER switch using the procedure on "Powering off the projector" in the section 8.1. "Servicing Methods" and consult your dealer or Authorized Service Center.

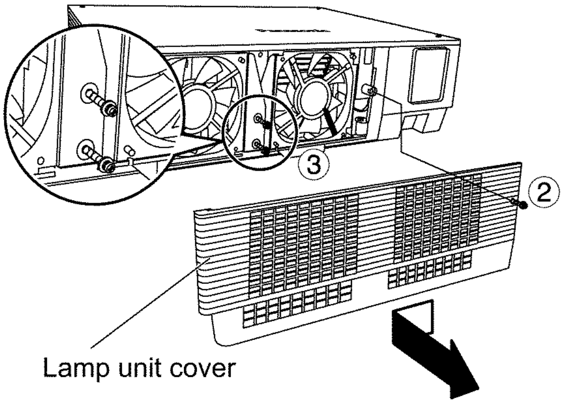
10.4. Procedure of Lamp Unit Replacement

NOTE:

- Be sure to follow steps 11 to 17 in ten minutes after turning on the projector because the projector is turned off in ten minutes if the RUNTIME indication is 1 500h or more.

① Turn off the MAIN POWER switch using the procedure on "Powering off the projector" in the section 8.1. "Servicing Methods", unplug the power cord and confirm that the surroundings of the lamp unit have cooled off.

Check that the fan has stopped running.

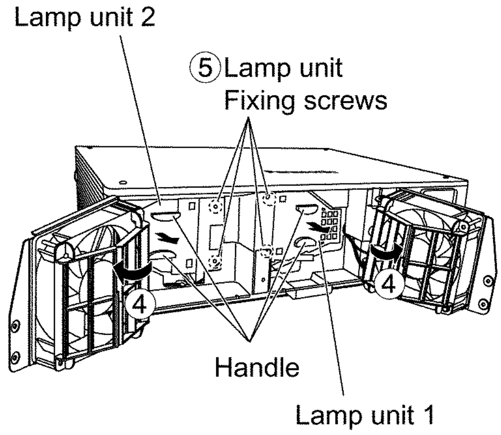


Have a Phillips screwdriver ready ahead of time.

② Remove the screw securing the lamp unit cover, and then slide the lamp unit cover a little toward the left, and remove it.

③ Remove the two screws securing the fan unit.

Note · The lamp units are constructed in such a way that the screws in steps ② and ③ will not fall through completely.



④ Open the fan unit as shown in the figure.

⑤ Remove the screws securing the lamp units (two for each unit), take hold of the grips, and remove the lamp units.

⑥ Install the new lamp unit.

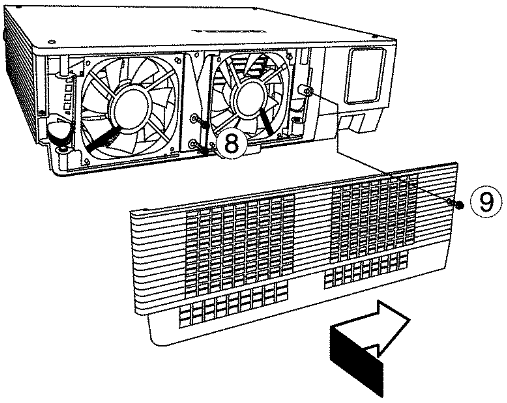
Caution

The lamp unit will be hot after it has been used.

You might get burned if you touch it while it is still hot.

⑦ Use a Phillips screwdriver to securely tighten the 2 lamp unit fixing screws (two for each unit).

⑧ Secure the two screws for securing the fan unit tightly.



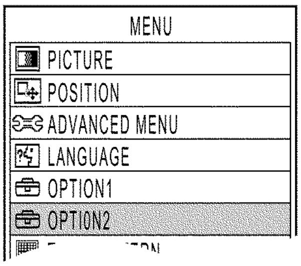
⑨ Slide the cover a little toward the right, and secure it using the screw for securing the lamp unit cover tightly.

Attention · Firmly install the lamp unit and lamp unit cover. If not installed firmly, a protection circuit will function and the power will not be turned on.

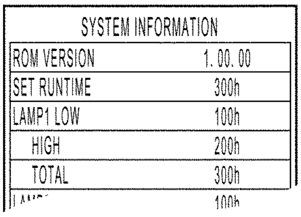
⑩ Insert the power cord plug into the wall outlet and then press the MAIN POWER switch.

Attention · If the power does not turn on even after turning the MAIN POWER switch "I", turn the MAIN POWER "O", confirm that the lamp unit and door are installed correctly, and turn on again.

⑪ Press the "POWER" button so that a picture is projected onto the screen.



⑫ Press the "MENU" button to display the MAIN MENU screen, and then press the ▲ and ▼ buttons to move the cursor to select "OPTION2".



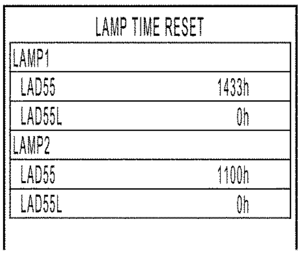
SYSTEM INFORMATION

ROM VERSION	1.00.00
SET RUNTIME	300h
LAMP1 LOW	100h
HIGH	200h
TOTAL	300h

⑬ Press the "ENTER" button to display the "OPTION2" screen, and select "SYSTEM INFORMATION" with the ▲ and ▼ buttons.

⑭ Press the "ENTER" button.

The SYSTEM INFORMATION screen will be displayed.



LAMP TIME RESET

LAMP1	
LAD55	1433h
LAD55L	0h
LAMP2	
LAD55	1100h
LAD55L	0h

⑮ Press and hold the "ENTER" button on the projector or the remote control for approximately 3 seconds.

An item "LAMP TIME RESET" will be added.

⑯ Select the lamp which has been replaced with the ▲ and ▼ buttons.

LAMP1: Replace the LAMP UNIT 1
LAMP2: Replace the LAMP UNIT 2

⑰ Press the ENTER button, and when the "LAMP TIME RESET" display flashes, press the ENTER button again.

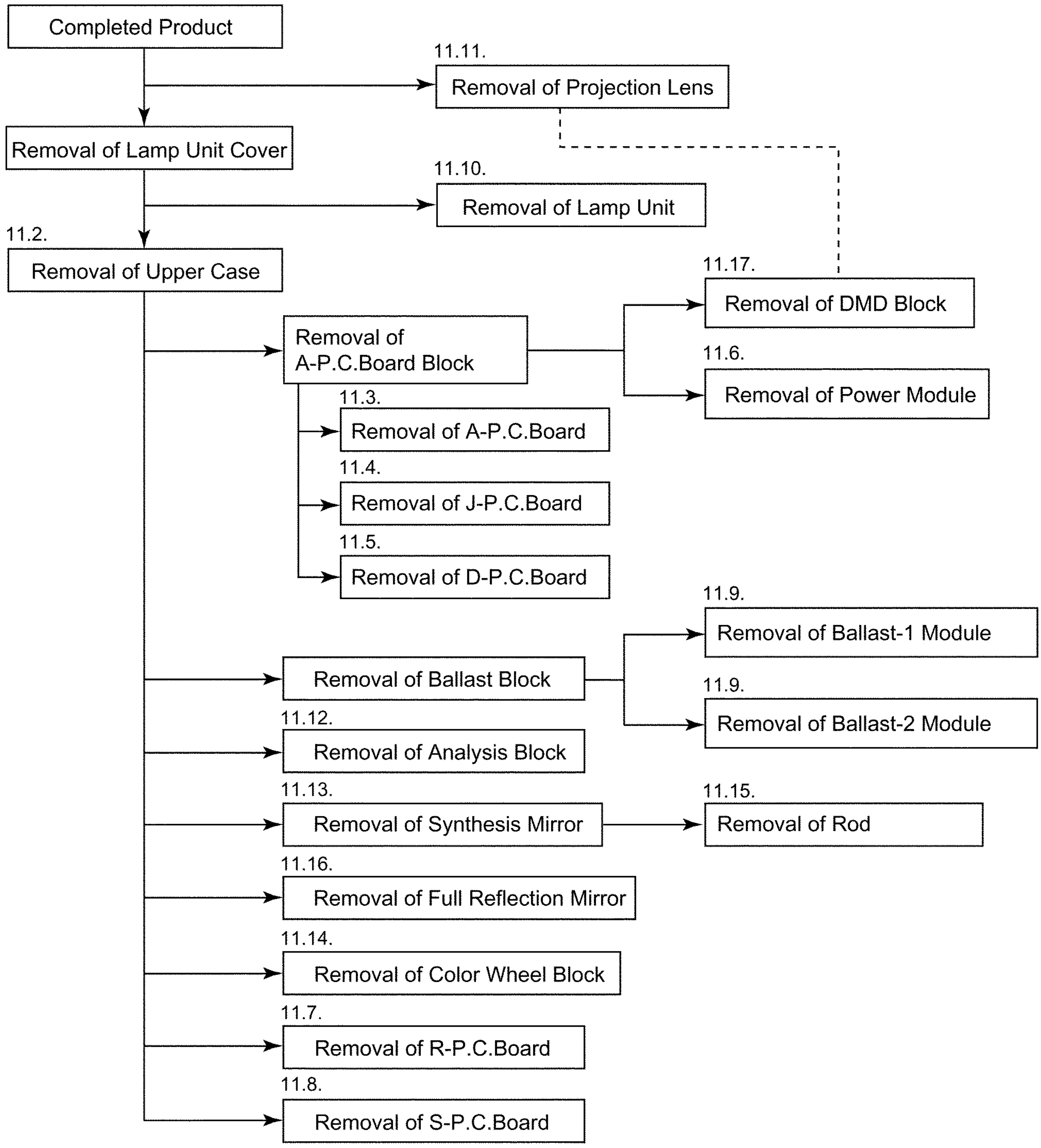
The used hours of the specified lamp unit will be reset to zero.
When more than one lamp has been replaced, repeat the procedure from step ⑯.

Note · When the "LAMP TIME RESET" display flashes, the lamp time reset can be canceled by pressing the MENU button.

11 Disassembly Instructions

11.1. Flowchart for Disassembly

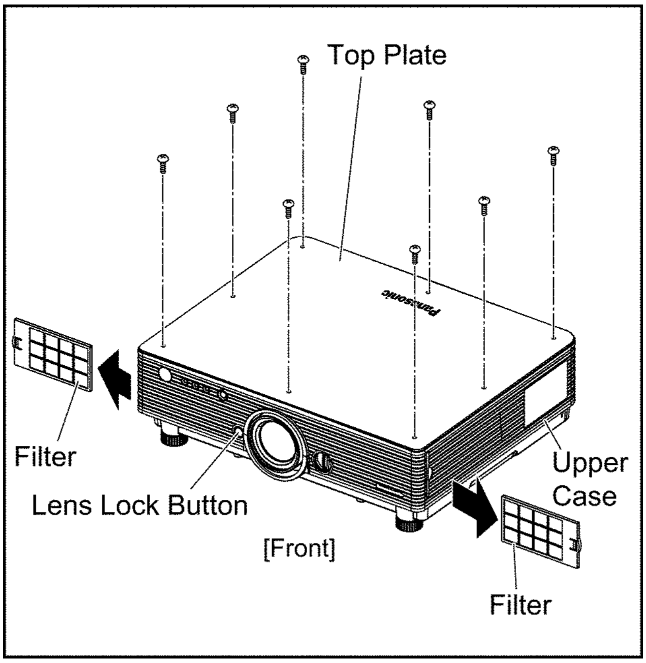
To assemble, reverse the disassembly procedures.


Completed Product
11.11.
Removal of Projection Lens
Removal of Lamp Unit Cover
11.10.
Removal of Lamp Unit
11.2.
Removal of Upper Case
11.17.
Removal of DMD Block
Removal of A-P.C.Board Block
11.6.
Removal of Power Module
11.3.
Removal of A-P.C.Board
11.4.
Removal of J-P.C.Board
11.5.
Removal of D-P.C.Board
11.9.
Removal of Ballast-1 Module
Removal of Ballast Block
11.9.
Removal of Ballast-2 Module
11.12.
Removal of Analysis Block
11.13.
Removal of Synthesis Mirror
11.15.
Removal of Rod
11.16.
Removal of Full Reflection Mirror
11.14.
Removal of Color Wheel Block
11.7.
Removal of R-P.C.Board
11.8.
Removal of S-P.C.Board

11.2. Removal of Upper Case

(1) Unscrew the 8 screws and remove the top plate.

(2) Remove the filters (R, L). (Pull them horizontally out.)

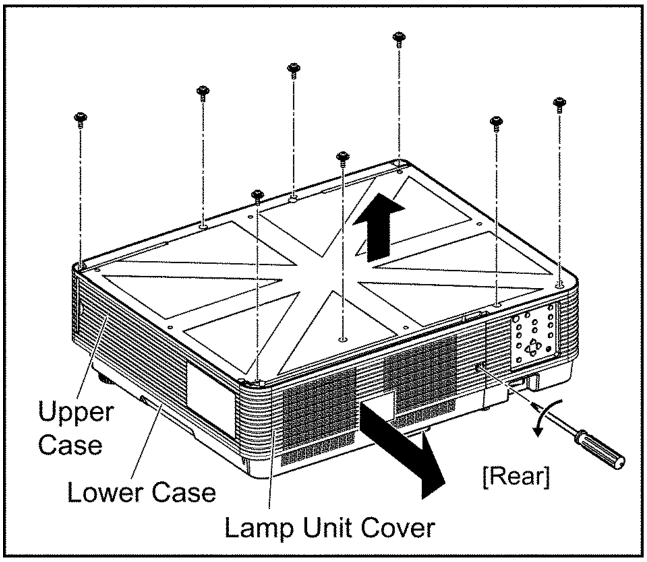

Top Plate
Filter
Lens Lock Button
Upper Case
[Front]
Filter

(3) Loosen the 1 screw fixing the lamp unit cover until it idles, slightly slide the cover horizontally and remove it.

(4) Unscrew the 8 screws and remove the upper case.

Note:

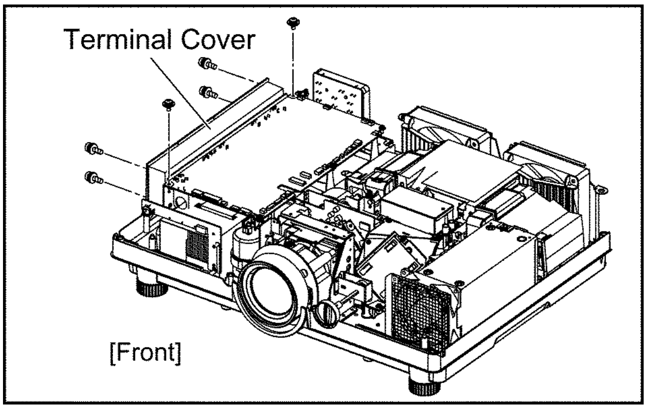
- Confirm the lens lock button actuates correctly when you reassemble the upper case as it was.


Upper Case
Lower Case
Lamp Unit Cover
[Rear]

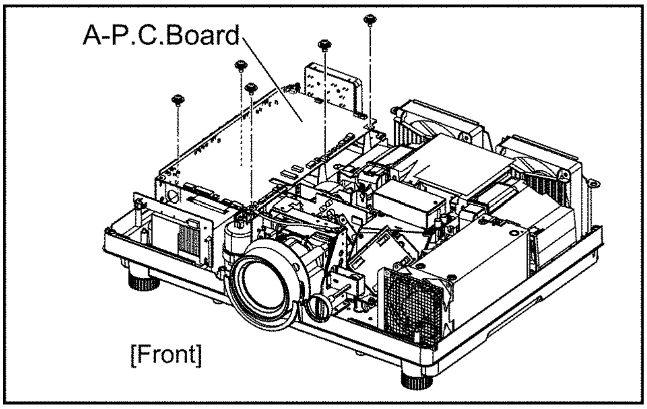
11.3. Removal of A-P.C.Board

(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".

(2) Unscrew the 6 screws and remove the terminal cover.

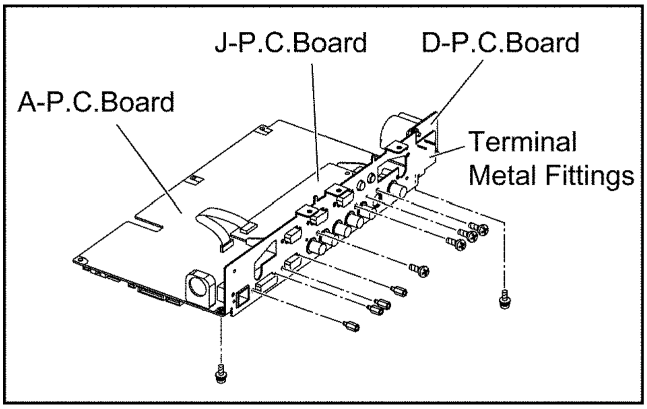

Terminal Cover
[Front]

(3) Unscrew the 5 screws and remove the A-P.C.Board block.


A-P.C.Board
[Front]

(4) Pull out the flexible cable connected to the J-P.C.Board. (The reverse side of A-P.C.Board)

(5) Unscrew the 10 screws and remove the A-P.C.Board. (The block of the terminal metal fittings, J-P.C.Board and D-P.C.Board remains.)

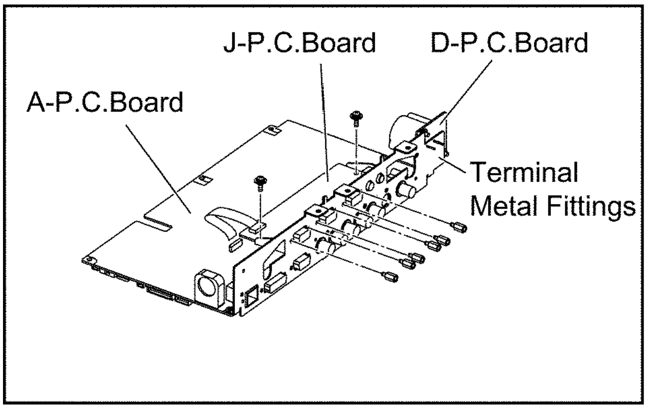

J-P.C.Board
D-P.C.Board
A-P.C.Board
Terminal
Metal Fittings

11.4. Removal of J-P.C.Board

(1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".

(2) Pull out the flexible cable connected to the A-P.C.Board.

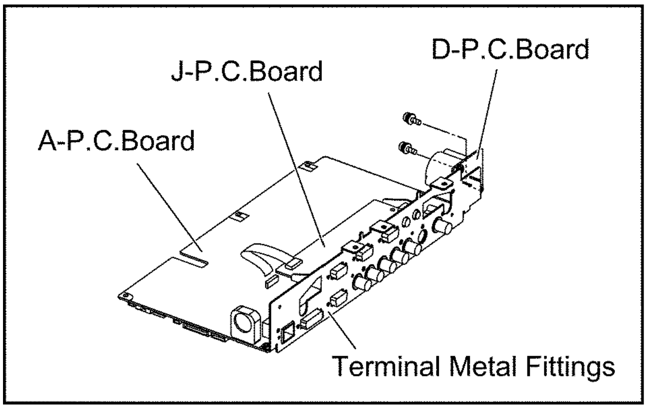
(3) Unscrew the 8 screws and remove the J-P.C.Board.


J-P.C.Board
D-P.C.Board
A-P.C.Board
Terminal
Metal Fittings

11.5. Removal of D-P.C.Board

(1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".

(2) Unscrew the 2 screws and remove the D-P.C.Board.

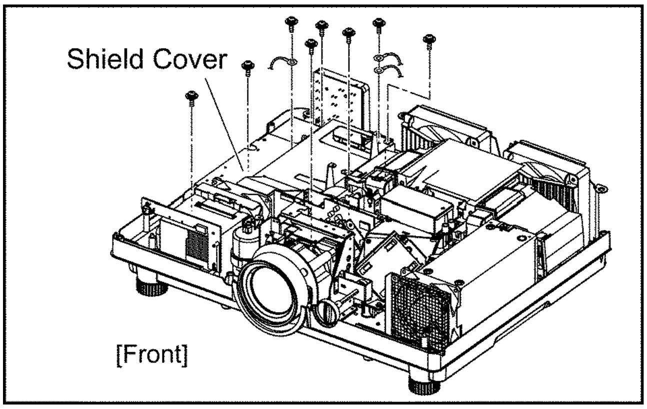

D-P.C.Board
J-P.C.Board
A-P.C.Board
Terminal Metal Fittings

11.6. Removal of Power Module

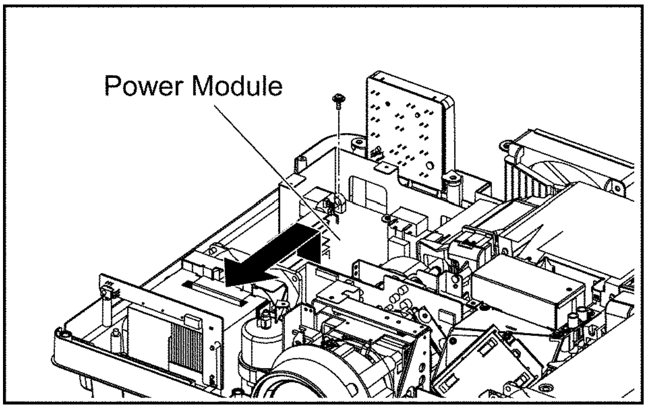
(1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".

(2) Unscrew the 2 screws and release the 2 grounding terminals.

(3) Unscrew the 6 screws and remove the shield cover.


Shield Cover
[Front]

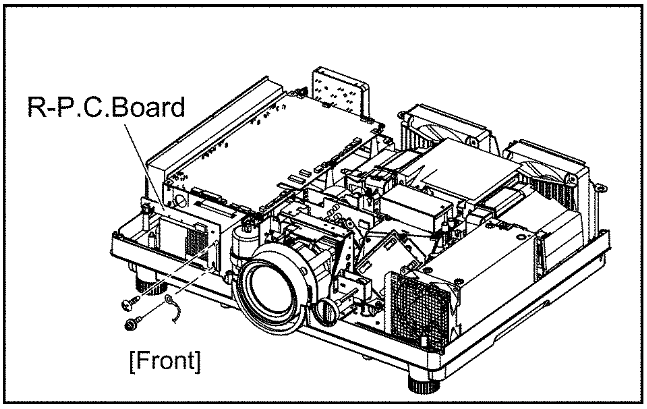
(4) Unscrew the 1 screw and remove the power module.


Power Module

11.7. Removal of R-P.C.Board

(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".

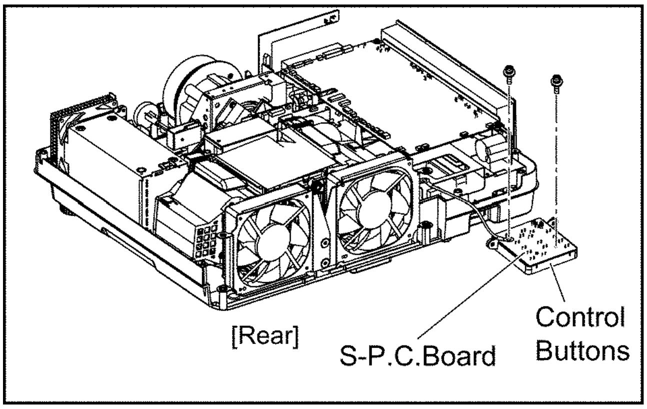
(2) Unscrew the 2 screws and remove the R-P.C.Board.


R-P.C.Board
[Front]

11.8. Removal of S-P.C.Board

(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".

(2) Unscrew the 2 screws and remove the S-P.C.Board from the control buttons.

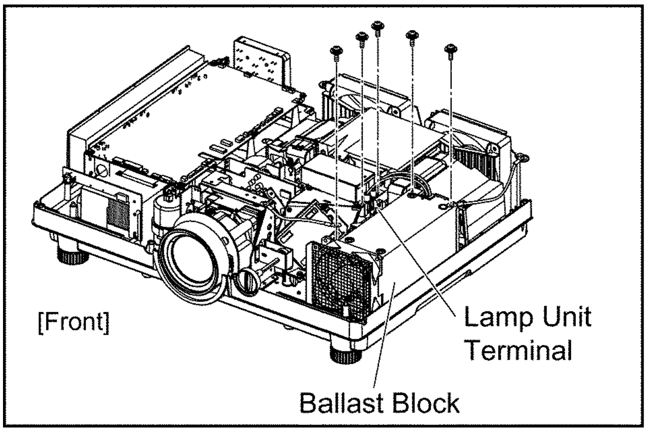

[Rear]
S-P.C.Board
Control Buttons

11.9. Removal of Ballast-1 and Ballast-2 Modules

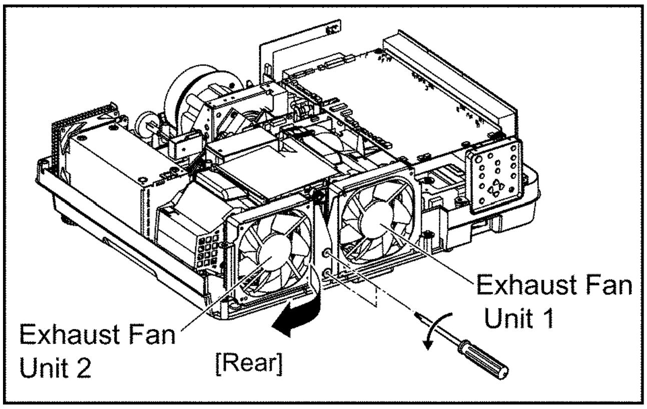
(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".

(2) Unscrew the 3 screws and release the grounding terminals.

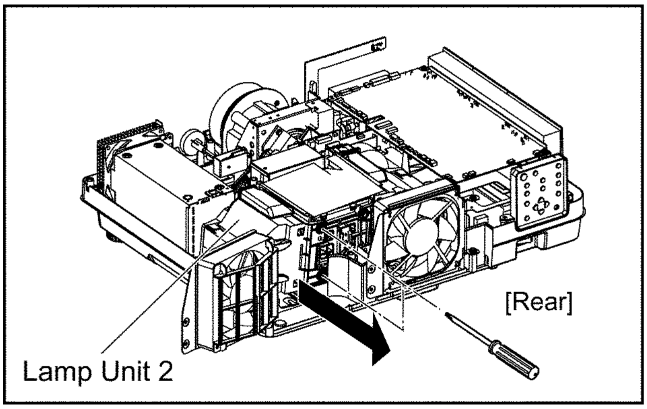
(3) Unscrew the 2 screws and release the lamp unit terminals.


[Front]
Lamp Unit Terminal
Ballast Block

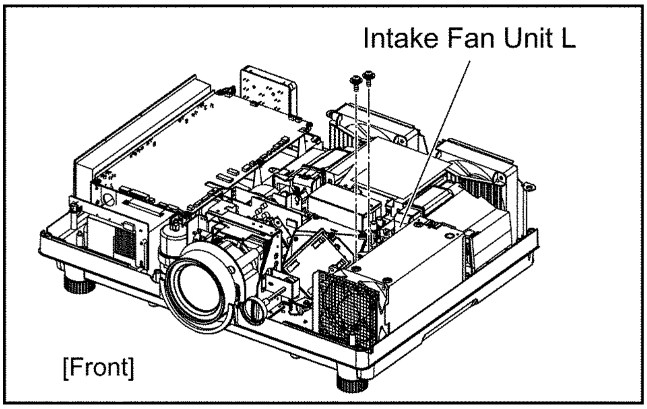
(4) Loosen the 2 screws until they idle and open the exhaust fan unit 2.


Exhaust Fan Unit 1
Exhaust Fan Unit 2
[Rear]

(5) Loosen the 2 screws fixing the lamp unit until they idle and remove the lamp unit 2.

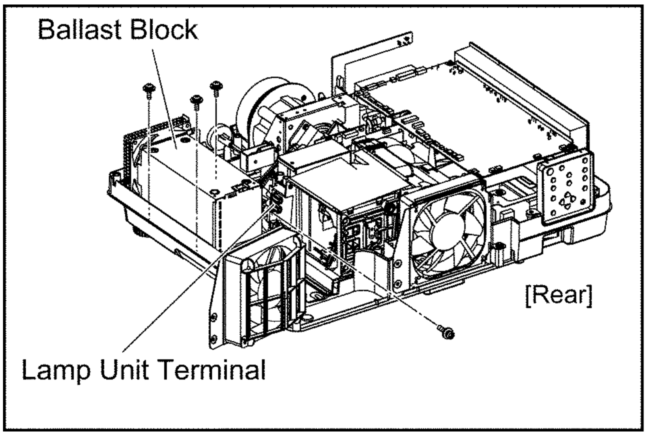

[Rear]
Lamp Unit 2

(6) Unscrew the 2 screws and remove the intake fan unit L.

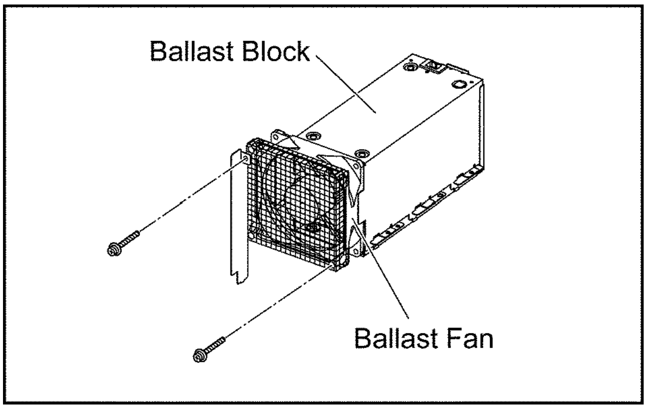

Intake Fan Unit L
[Front]

(7) Unscrew the 1 screw and release the lamp unit terminal.

(8) Unscrew the 3 screws and release the ballast block.


Ballast Block
[Rear]
Lamp Unit Terminal

(9) Unscrew the 2 screws and remove the ballast fan.

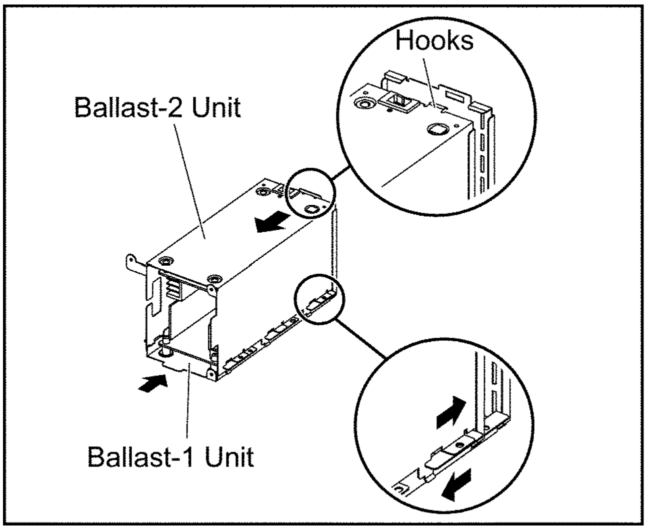

Ballast Block
Ballast Fan

(10) Disconnect the connectors to the ballast-1 and ballast-2 modules.

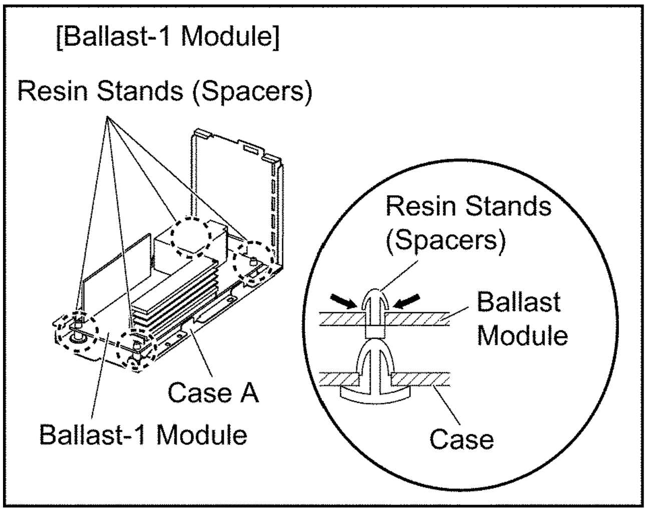
(11) While sliding the ballast units 1 and 2 mutually, disconnect their hooks and separate the units.

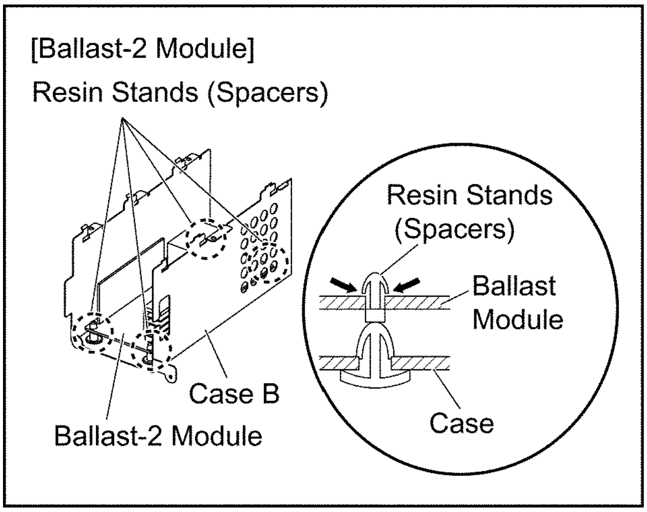
Note:

- Work carefully not to deform the ballast unit case (A, B).


Hooks
Ballast-2 Unit
Ballast-1 Unit

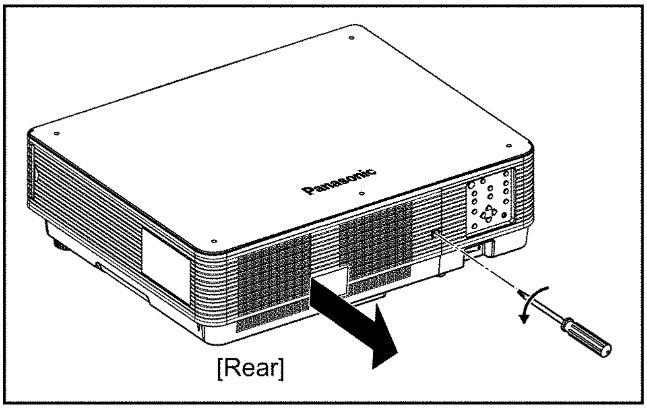
(12) Remove the ballast module while pressing hooks of the 4 resin stands (spacers) to shut.


[Ballast-1 Module]
Resin Stands (Spacers)
Case A
Ballast-1 Module
Resin Stands (Spacers)
Ballast Module
Case

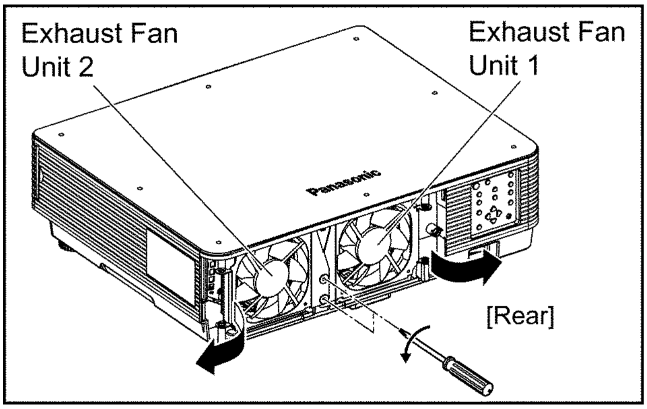

[Ballast-2 Module]
Resin Stands (Spacers)
Case B
Ballast-2 Module
Resin Stands (Spacers)
Ballast Module
Case

11.10. Removal of Lamp Unit

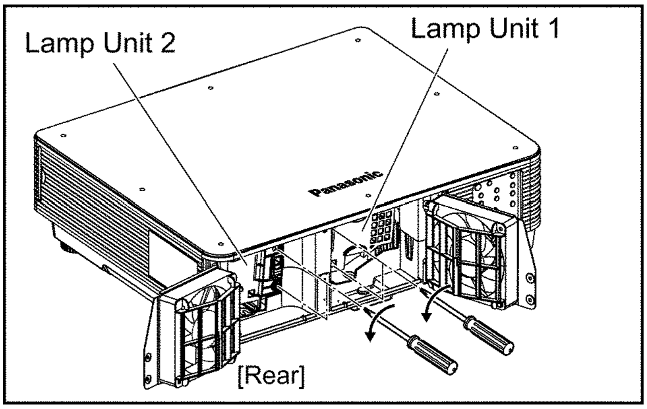
(1) Loosen the 1 screw fixing the lamp unit cover until it idles, slightly slide the cover horizontally and remove it.


Panasonic
[Rear]

(2) Loosen the 2 screws until they idle and open the exhaust fan units outside.

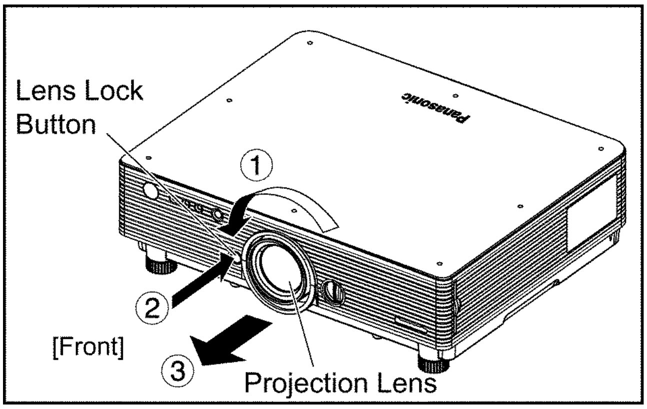

Exhaust Fan Unit 2
Exhaust Fan Unit 1
Panasonic
[Rear]

(3) Loosen the 2 screws fixing the lamp unit until they idle, hold the grip and take the lamp unit out.


Lamp Unit 2
Lamp Unit 1
[Rear]

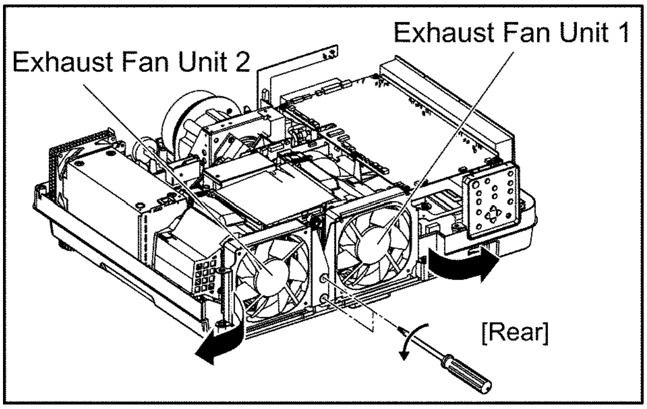
11.11. Removal of Projection Lens

(1) Fully turn the projection Lens counterclockwise.
(2) Turn the projection lens counterclockwise in addition while pressing the lens lock button.
(3) Remove the projection lens.

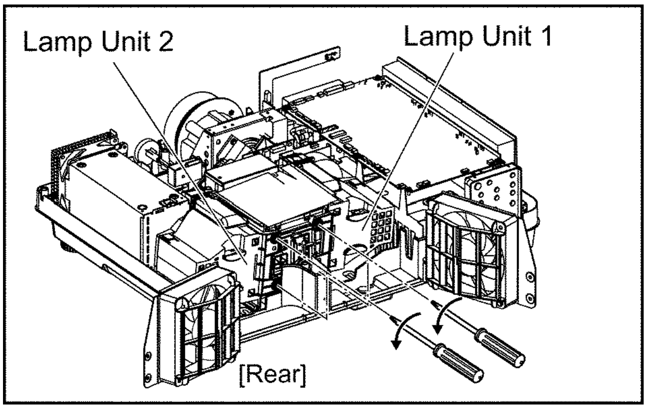

Lens Lock
Button
①
②
[Front]
③
Projection Lens

11.12. Removal of Analysis Block

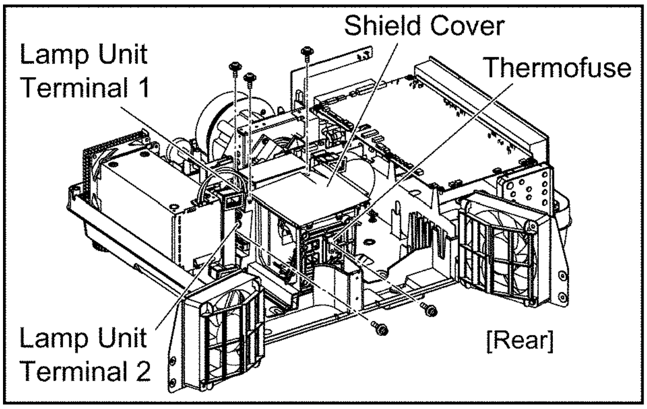
(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
(2) Loosen the 2 screws until they idle and open the exhaust fan units 1 and 2 outside.


Exhaust Fan Unit 2
Exhaust Fan Unit 1
[Rear]

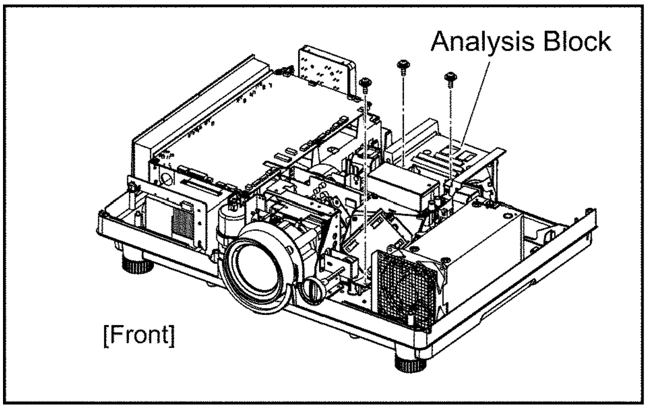
(3) Loosen each of 2 screws fixing the lamp units until they idle, remove the lamp units 1 and 2.


Lamp Unit 2
Lamp Unit 1
[Rear]

(4) Unscrew the 2 screws and release the lamp unit terminal 1.
(5) Unscrew the 1 screw and release the lamp unit terminal 2.
(6) Unscrew the 1 screw and remove the thermofuse.
(7) Unscrew the 1 screw and remove the shield cover.

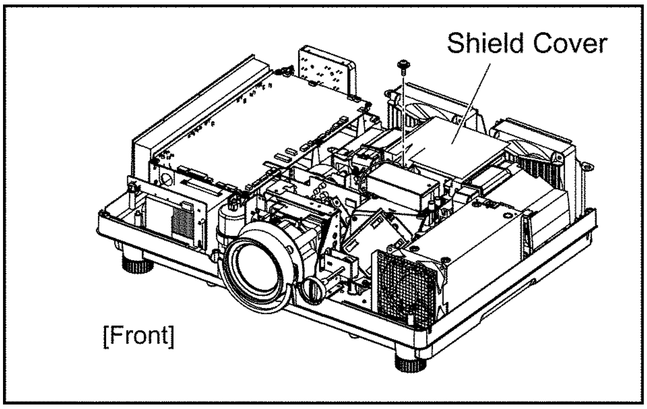

Shield Cover
Lamp Unit Terminal 1
Thermofuse
Lamp Unit Terminal 2
[Rear]

(8) Unscrew the 2 screws and release the grounding terminals.
(9) Unscrew the 3 screws and remove the analysis block.


Analysis Block
[Front]

11.13. Removal of Synthesis Mirror

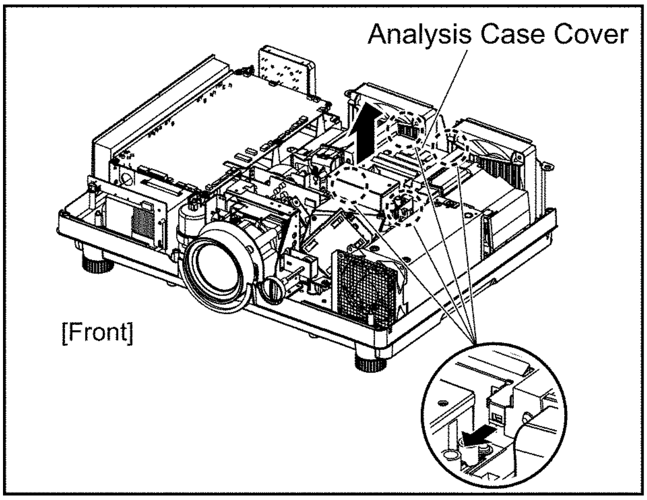
(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".
(2) Unscrew the 1 screw and remove the grounding terminal and shield cover.


Shield Cover
[Front]

(3) Unhook the 4 hooks and remove the analysis case cover.

Notes:

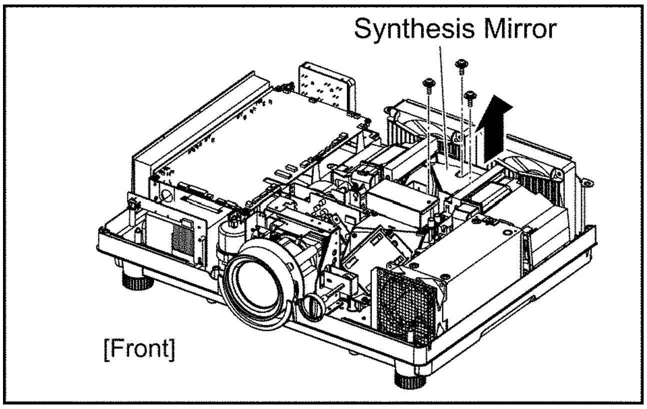
- Work carefully not to deform the hooks of the analysis case cover.
- When the analysis case cover is removed, be careful not to touch the rod.


Analysis Case Cover
[Front]

(4) Unscrew the 3 screws and remove the synthesis mirror.

Notes:

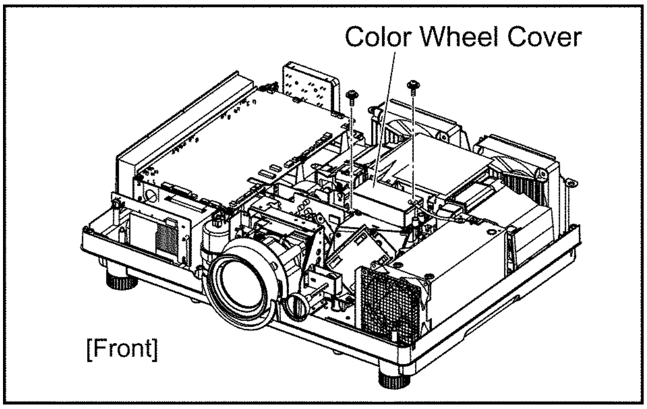
- When the synthesis mirror is removed, be careful not to deform or damage the component (shading plate) of the rod (complete).
- Do not touch the surface of the synthesis mirror. If it becomes dirty or damaged, the performance may be deteriorated.



11.14. Removal of Color Wheel Block (Analysis Block)

(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".

(2) Unscrew the 2 screws and remove the color wheel cover.

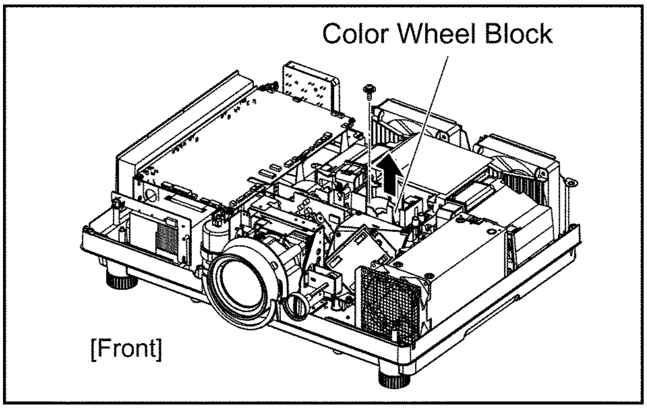


(3) Disconnect connectors and flexible cable from/to the color wheel block.

(4) Unscrew the 1 screw and remove the color wheel block.

Note:

- If the optical components (color wheel, rod in the analysis block, etc.) become dirty or damaged, the performance may be deteriorated. Work carefully enough in handling.



11.15. Removal of Rod (complete)

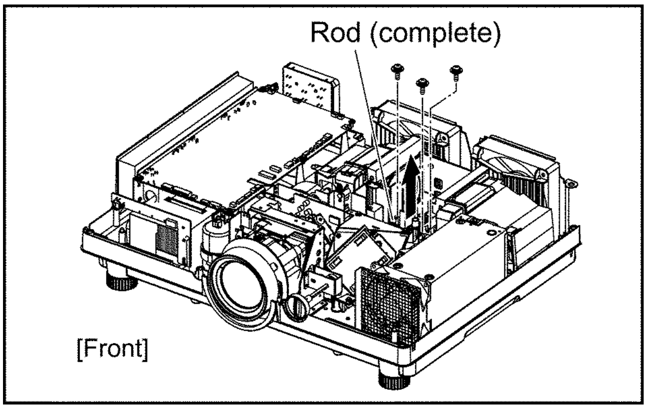
(1) Remove the synthesis mirror according to the section 11.13. "Removal of Synthesis Mirror".

(2) Remove the color wheel block according to the section 11.14. "Removal of Color Wheel Block (Analysis Block)".

(3) Unscrew the 3 screws and remove the rod (complete).

Note:

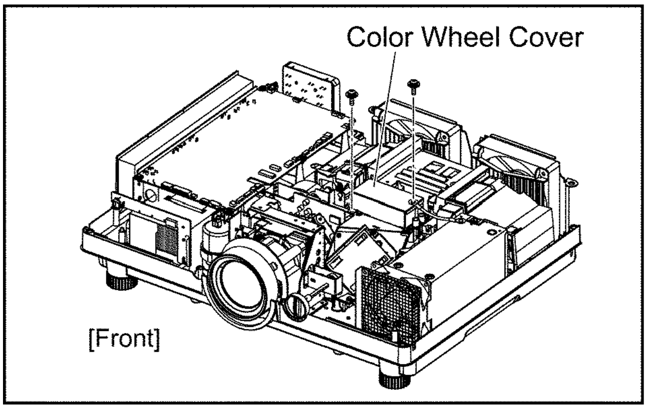
- Handle with care not to make dirty, damage or deform the rod integrator or shading plate of the rod (complete).



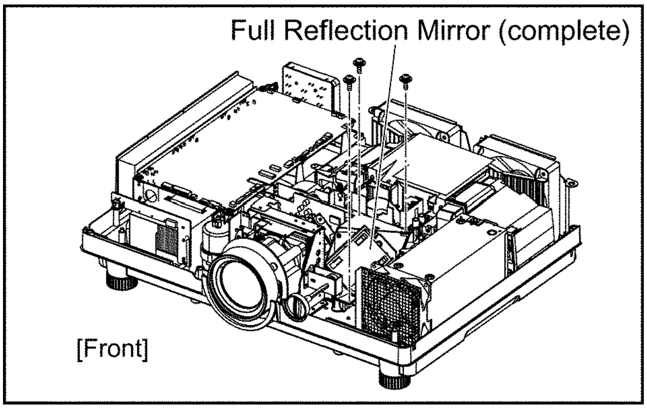
11.16. Removal of Full Reflection Mirror (complete)

(1) Remove the upper case according to the section 11.2. "Removal of Upper Case".

(2) Unscrew the 2 screws and remove the color wheel cover.


Color Wheel Cover
[Front]

(3) Unscrew the 3 screws and remove the full reflection mirror (complete).


Full Reflection Mirror (complete)
[Front]

11.17. Removal of DMD Block (complete)

(1) Remove the A-P.C.Board block according to the steps 1 through 3 in the section 11.3. "Removal of A-P.C.Board".

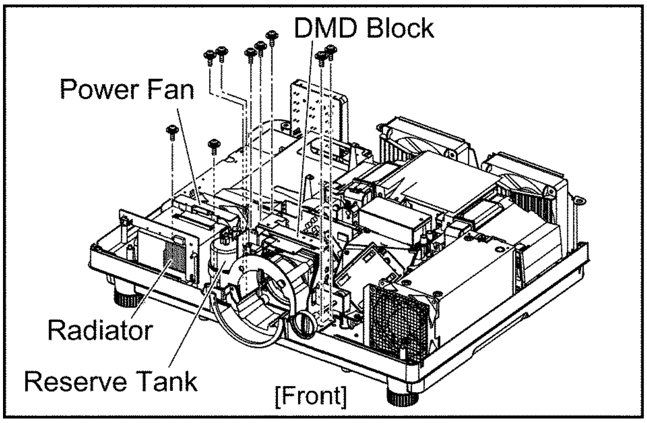
(2) Remove the projection lens according to the section 11.11. "Removal of Projection Lens".

(3) Unscrew the 2 screws and remove the power fan with metal fittings. [The radiator (liquid-cooled module) is released.]

(4) Unscrew the 2 screws and release the reserve tank (liquid-cooled module).

(5) Unscrew the 5 screws and release the DMD block. [The pump (liquid-cooled module) is installed in the back of the DMD block.]

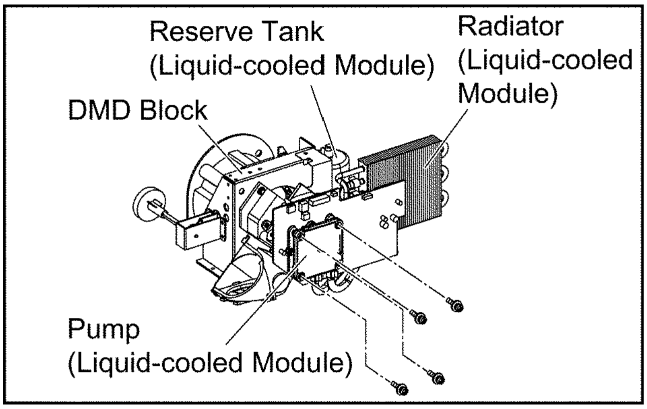
(6) Take the DMD block and the liquid-cooled module (radiator, reserve tank) out. (They are laid pipes from/to tubes of the liquid-cooled module.)


DMD Block
Power Fan
Radiator
Reserve Tank
[Front]

(7) Unscrew the 4 screws and remove the pump (liquid-cooled module).

Note:

- Do not disconnect the piping tube of the liquid-cooled module.


Reserve Tank
(Liquid-cooled Module)
Radiator
(Liquid-cooled
Module)
DMD Block
Pump
(Liquid-cooled Module)

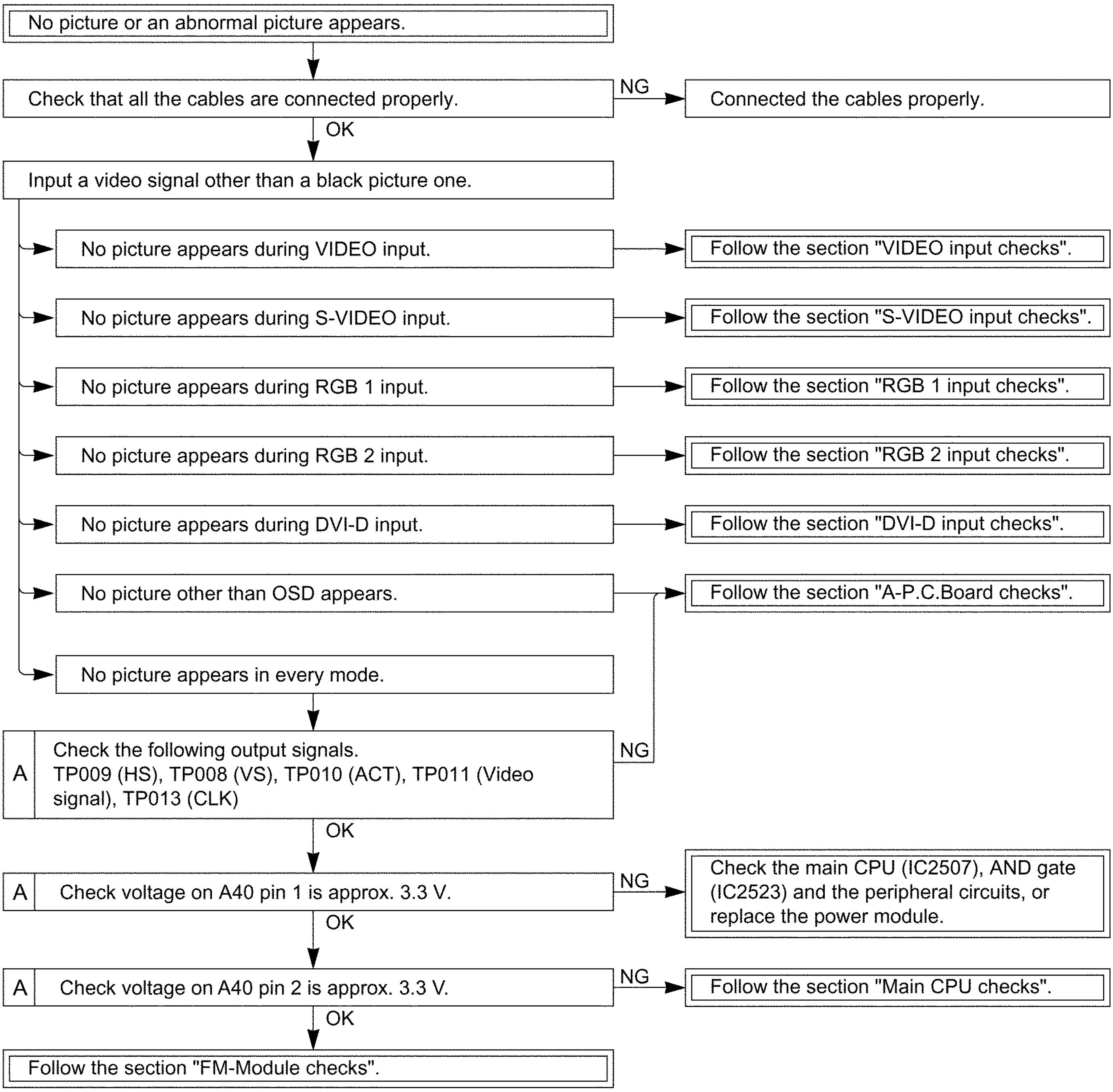
Caution for disassembling

- The DMD block periphery is composed of precise optical components.

  When disassembling or reassembling, work noting damage and the wound of the peripheral components.

12 Troubleshooting

The alphabets in the left box of the inspection items indicate the names of P.C.Boards or modules to be checked.



No picture or an abnormal picture appears.

Check that all the cables are connected properly.

Connected the cables properly.

Input a video signal other than a black picture one.

No picture appears during VIDEO input.

Follow the section "VIDEO input checks".

No picture appears during S-VIDEO input.

Follow the section "S-VIDEO input checks".

No picture appears during RGB 1 input.

Follow the section "RGB 1 input checks".

No picture appears during RGB 2 input.

Follow the section "RGB 2 input checks".

No picture appears during DVI-D input.

Follow the section "DVI-D input checks".

No picture other than OSD appears.

Follow the section "A-P.C.Board checks".

No picture appears in every mode.

A Check the following output signals. TP009 (HS), TP008 (VS), TP010 (ACT), TP011 (Video signal), TP013 (CLK)

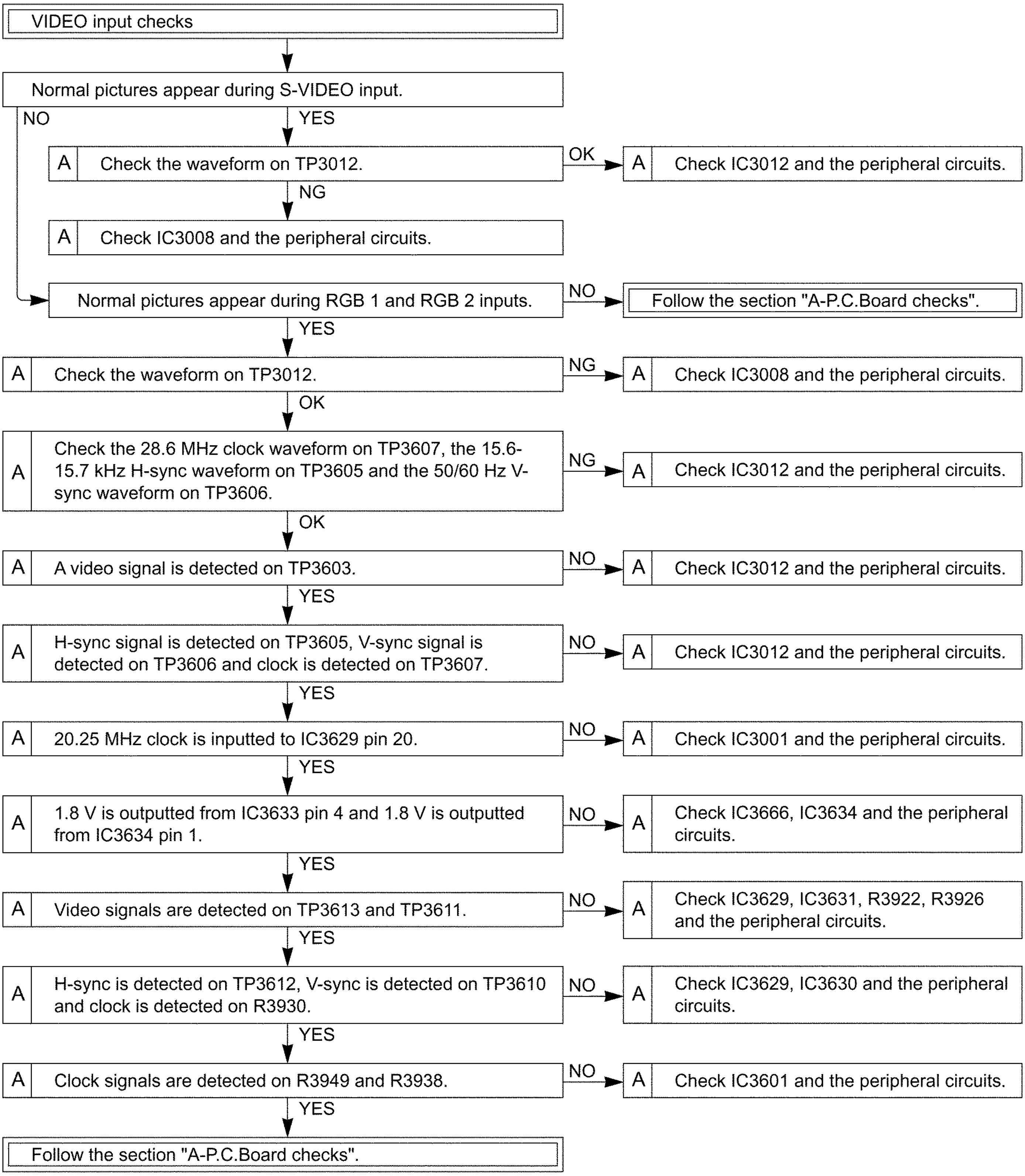
A Check voltage on A40 pin 1 is approx. 3.3 V.

Check the main CPU (IC2507), AND gate (IC2523) and the peripheral circuits, or replace the power module.

A Check voltage on A40 pin 2 is approx. 3.3 V.

Follow the section "Main CPU checks".

Follow the section "FM-Module checks".



VIDEO input checks

Normal pictures appear during S-VIDEO input.

- YES: A Check the waveform on TP3012.
  - OK: A Check IC3012 and the peripheral circuits.
  - NG: A Check IC3008 and the peripheral circuits.
- NO: Normal pictures appear during RGB 1 and RGB 2 inputs.
  - NO: Follow the section "A-P.C.Board checks".
  - YES: A Check the waveform on TP3012.

A Check the waveform on TP3012.
- NG: A Check IC3008 and the peripheral circuits.
- OK: A Check the 28.6 MHz clock waveform on TP3607, the 15.6-15.7 kHz H-sync waveform on TP3605 and the 50/60 Hz V-sync waveform on TP3606.

A Check the 28.6 MHz clock waveform on TP3607, the 15.6-15.7 kHz H-sync waveform on TP3605 and the 50/60 Hz V-sync waveform on TP3606.
- NG: A Check IC3012 and the peripheral circuits.
- OK: A A video signal is detected on TP3603.

A A video signal is detected on TP3603.
- NO: A Check IC3012 and the peripheral circuits.
- YES: A H-sync signal is detected on TP3605, V-sync signal is detected on TP3606 and clock is detected on TP3607.

A H-sync signal is detected on TP3605, V-sync signal is detected on TP3606 and clock is detected on TP3607.
- NO: A Check IC3012 and the peripheral circuits.
- YES: A 20.25 MHz clock is inputted to IC3629 pin 20.

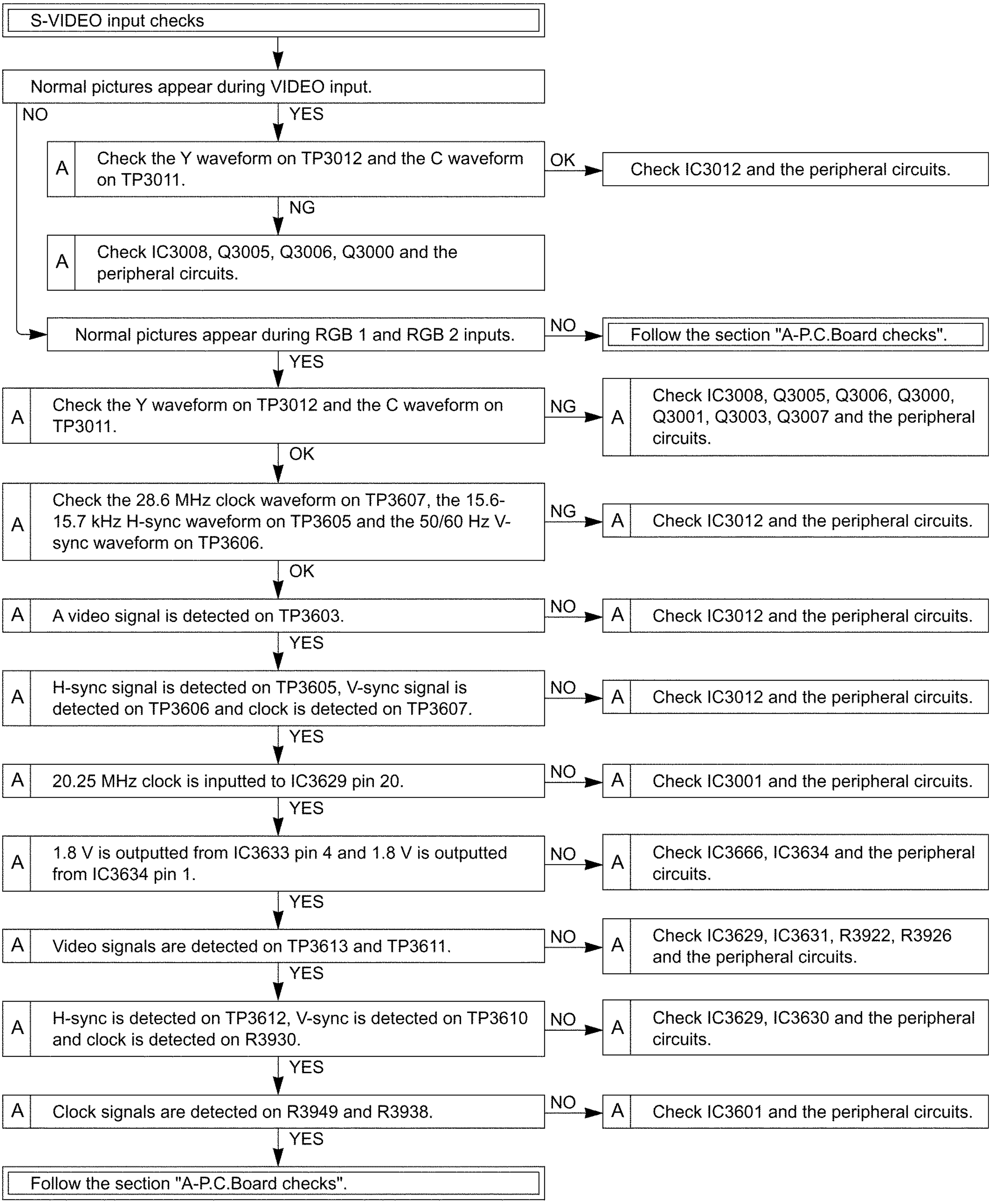
A 20.25 MHz clock is inputted to IC3629 pin 20.
- NO: A Check IC3001 and the peripheral circuits.
- YES: A 1.8 V is outputted from IC3633 pin 4 and 1.8 V is outputted from IC3634 pin 1.

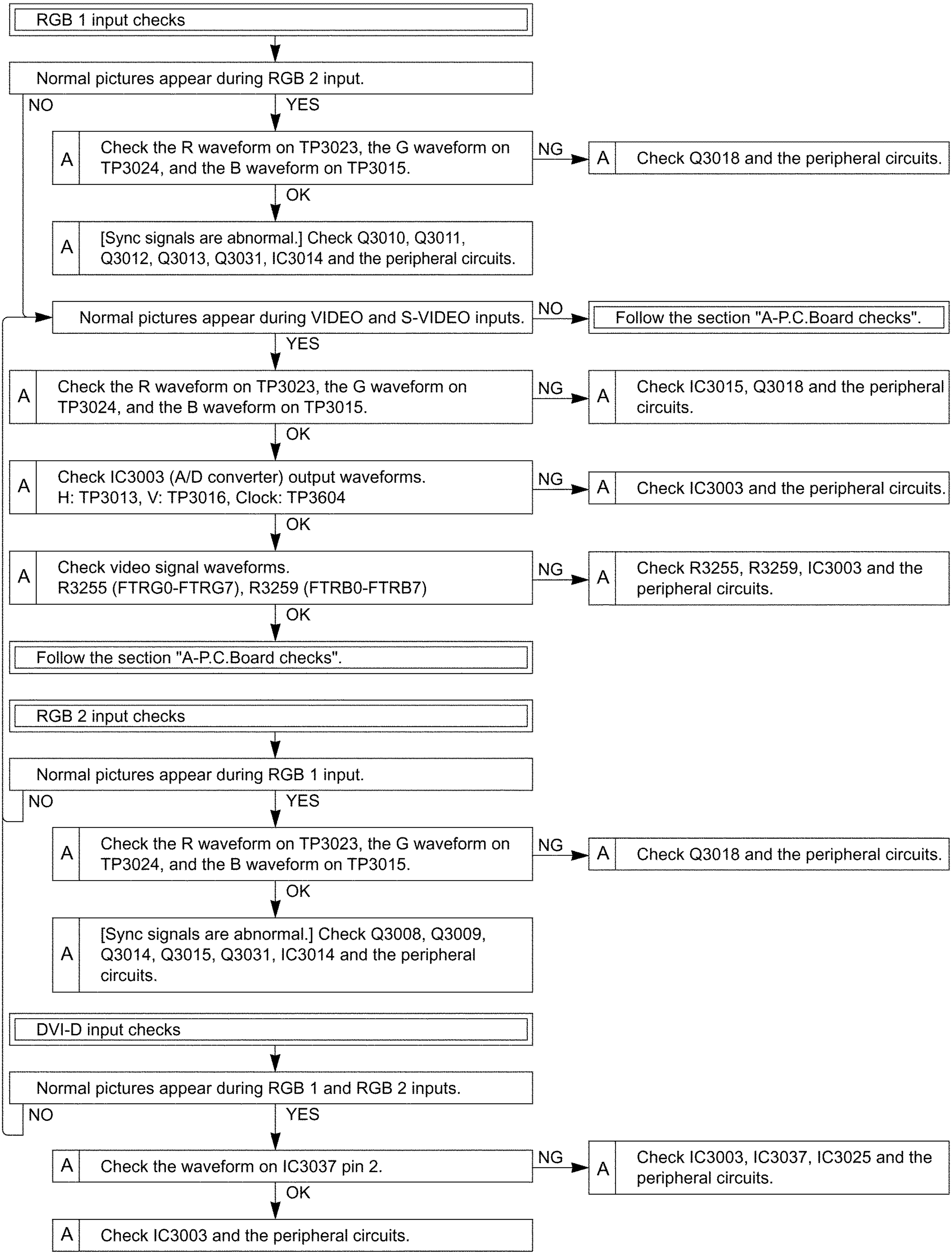
A 1.8 V is outputted from IC3633 pin 4 and 1.8 V is outputted from IC3634 pin 1.
- NO: A Check IC3666, IC3634 and the peripheral circuits.
- YES: A Video signals are detected on TP3613 and TP3611.

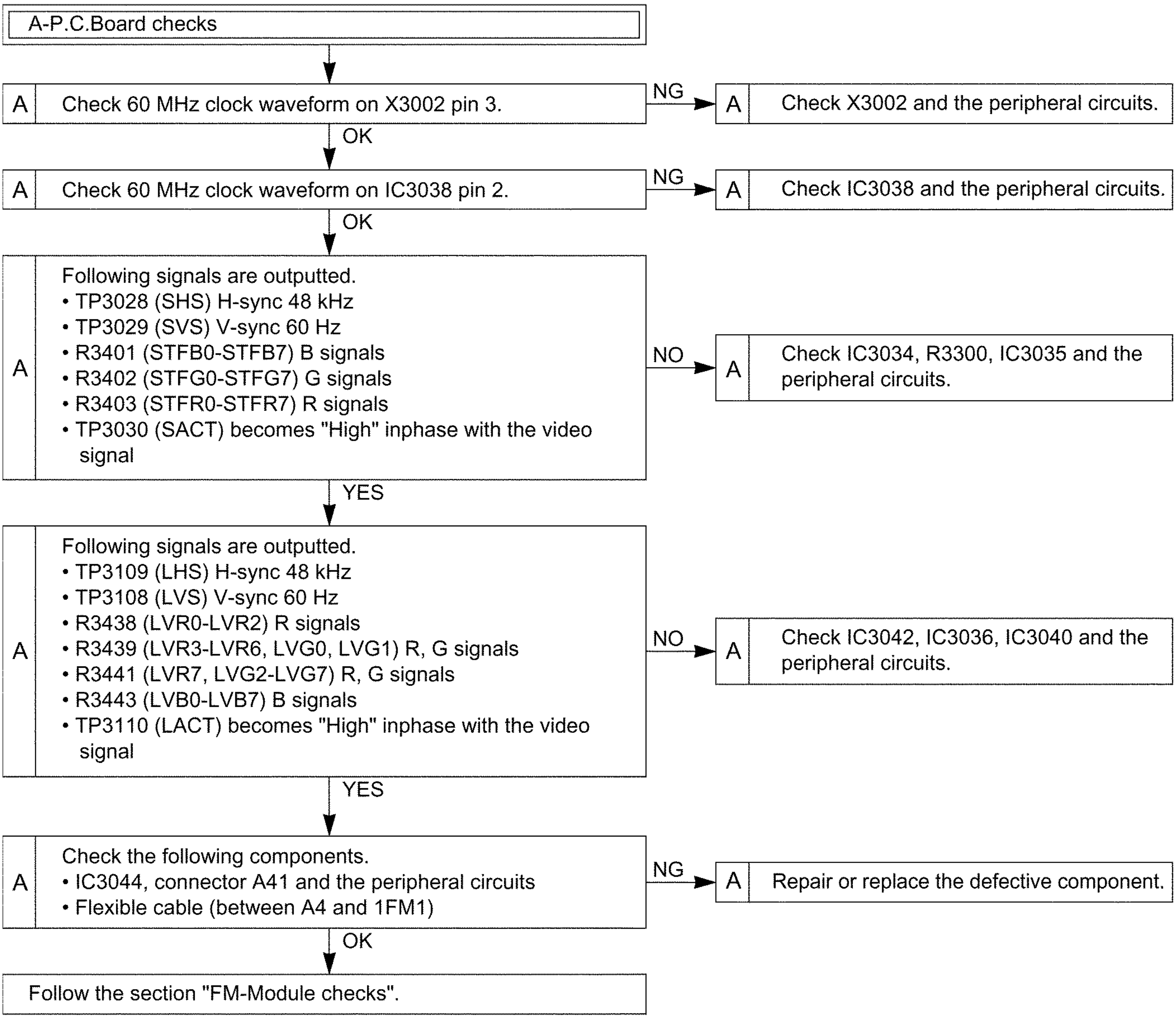
A Video signals are detected on TP3613 and TP3611.
- NO: A Check IC3629, IC3631, R3922, R3926 and the peripheral circuits.
- YES: A H-sync is detected on TP3612, V-sync is detected on TP3610 and clock is detected on R3930.

A H-sync is detected on TP3612, V-sync is detected on TP3610 and clock is detected on R3930.
- NO: A Check IC3629, IC3630 and the peripheral circuits.
- YES: A Clock signals are detected on R3949 and R3938.

A Clock signals are detected on R3949 and R3938.
- NO: A Check IC3601 and the peripheral circuits.
- YES: Follow the section "A-P.C.Board checks".


S-VIDEO input checks
Normal pictures appear during VIDEO input.
NO
YES
A
Check the Y waveform on TP3012 and the C waveform on TP3011.
OK
Check IC3012 and the peripheral circuits.
NG
A
Check IC3008, Q3005, Q3006, Q3000 and the peripheral circuits.
Normal pictures appear during RGB 1 and RGB 2 inputs.
NO
Follow the section "A-P.C.Board checks".
YES
A
Check the Y waveform on TP3012 and the C waveform on TP3011.
NG
A
Check IC3008, Q3005, Q3006, Q3000, Q3001, Q3003, Q3007 and the peripheral circuits.
OK
A
Check the 28.6 MHz clock waveform on TP3607, the 15.6-15.7 kHz H-sync waveform on TP3605 and the 50/60 Hz V-sync waveform on TP3606.
NG
A
Check IC3012 and the peripheral circuits.
OK
A
A video signal is detected on TP3603.
NO
A
Check IC3012 and the peripheral circuits.
YES
A
H-sync signal is detected on TP3605, V-sync signal is detected on TP3606 and clock is detected on TP3607.
NO
A
Check IC3012 and the peripheral circuits.
YES
A
20.25 MHz clock is inputted to IC3629 pin 20.
NO
A
Check IC3001 and the peripheral circuits.
YES
A
1.8 V is outputted from IC3633 pin 4 and 1.8 V is outputted from IC3634 pin 1.
NO
A
Check IC3666, IC3634 and the peripheral circuits.
YES
A
Video signals are detected on TP3613 and TP3611.
NO
A
Check IC3629, IC3631, R3922, R3926 and the peripheral circuits.
YES
A
H-sync is detected on TP3612, V-sync is detected on TP3610 and clock is detected on R3930.
NO
A
Check IC3629, IC3630 and the peripheral circuits.
YES
A
Clock signals are detected on R3949 and R3938.
NO
A
Check IC3601 and the peripheral circuits.
YES
Follow the section "A-P.C.Board checks".


RGB 1 input checks
Normal pictures appear during RGB 2 input.
NO
YES
A
Check the R waveform on TP3023, the G waveform on TP3024, and the B waveform on TP3015.
NG
A
Check Q3018 and the peripheral circuits.
OK
A
[Sync signals are abnormal.] Check Q3010, Q3011, Q3012, Q3013, Q3031, IC3014 and the peripheral circuits.
Normal pictures appear during VIDEO and S-VIDEO inputs.
NO
Follow the section "A-P.C.Board checks".
YES
A
Check the R waveform on TP3023, the G waveform on TP3024, and the B waveform on TP3015.
NG
A
Check IC3015, Q3018 and the peripheral circuits.
OK
A
Check IC3003 (A/D converter) output waveforms. H: TP3013, V: TP3016, Clock: TP3604
NG
A
Check IC3003 and the peripheral circuits.
OK
A
Check video signal waveforms. R3255 (FTRG0-FTRG7), R3259 (FTRB0-FTRB7)
NG
A
Check R3255, R3259, IC3003 and the peripheral circuits.
OK
Follow the section "A-P.C.Board checks".
RGB 2 input checks
Normal pictures appear during RGB 1 input.
NO
YES
A
Check the R waveform on TP3023, the G waveform on TP3024, and the B waveform on TP3015.
NG
A
Check Q3018 and the peripheral circuits.
OK
A
[Sync signals are abnormal.] Check Q3008, Q3009, Q3014, Q3015, Q3031, IC3014 and the peripheral circuits.
DVI-D input checks
Normal pictures appear during RGB 1 and RGB 2 inputs.
NO
YES
A
Check the waveform on IC3037 pin 2.
NG
A
Check IC3003, IC3037, IC3025 and the peripheral circuits.
OK
A
Check IC3003 and the peripheral circuits.



A-P.C.Board checks

A Check 60 MHz clock waveform on X3002 pin 3.

NG → A Check X3002 and the peripheral circuits.

OK

A Check 60 MHz clock waveform on IC3038 pin 2.

NG → A Check IC3038 and the peripheral circuits.

OK

A Following signals are outputted.
- TP3028 (SHS) H-sync 48 kHz
- TP3029 (SVS) V-sync 60 Hz
- R3401 (STFB0-STFB7) B signals
- R3402 (STFG0-STFG7) G signals
- R3403 (STFR0-STFR7) R signals
- TP3030 (SACT) becomes "High" inphase with the video signal

NO → A Check IC3034, R3300, IC3035 and the peripheral circuits.

YES

A Following signals are outputted.
- TP3109 (LHS) H-sync 48 kHz
- TP3108 (LVS) V-sync 60 Hz
- R3438 (LVR0-LVR2) R signals
- R3439 (LVR3-LVR6, LVG0, LVG1) R, G signals
- R3441 (LVR7, LVG2-LVG7) R, G signals
- R3443 (LVB0-LVB7) B signals
- TP3110 (LACT) becomes "High" inphase with the video signal

NO → A Check IC3042, IC3036, IC3040 and the peripheral circuits.

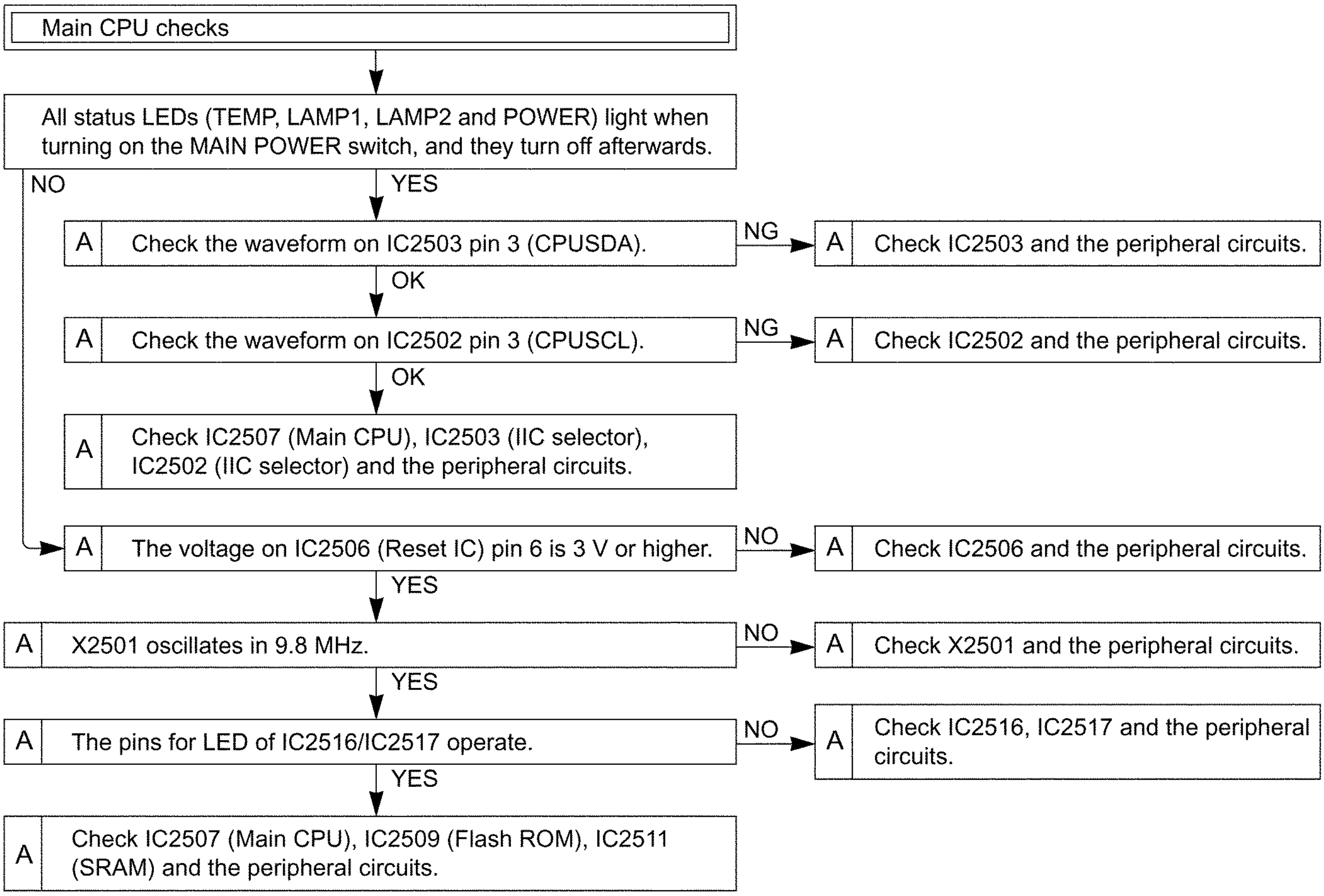
YES

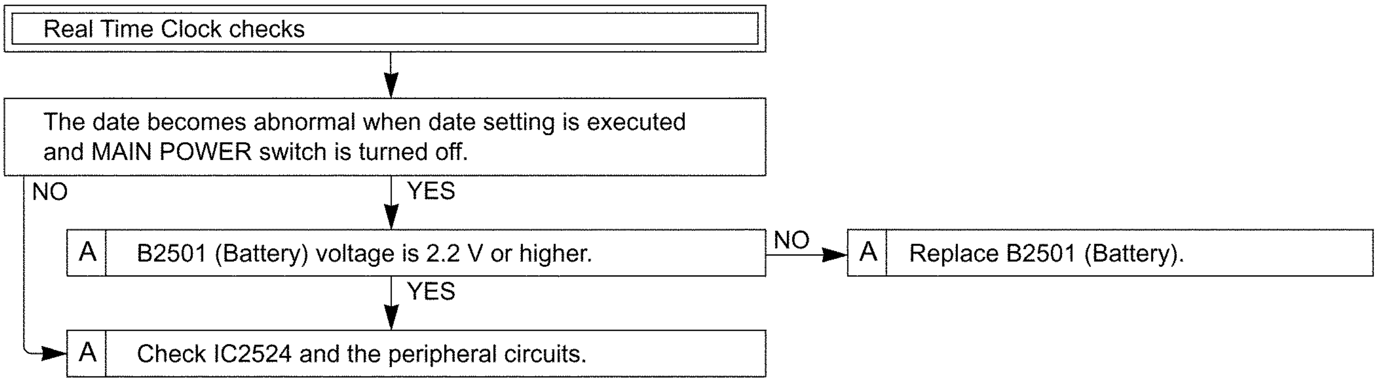
A Check the following components.
- IC3044, connector A41 and the peripheral circuits
- Flexible cable (between A4 and 1FM1)

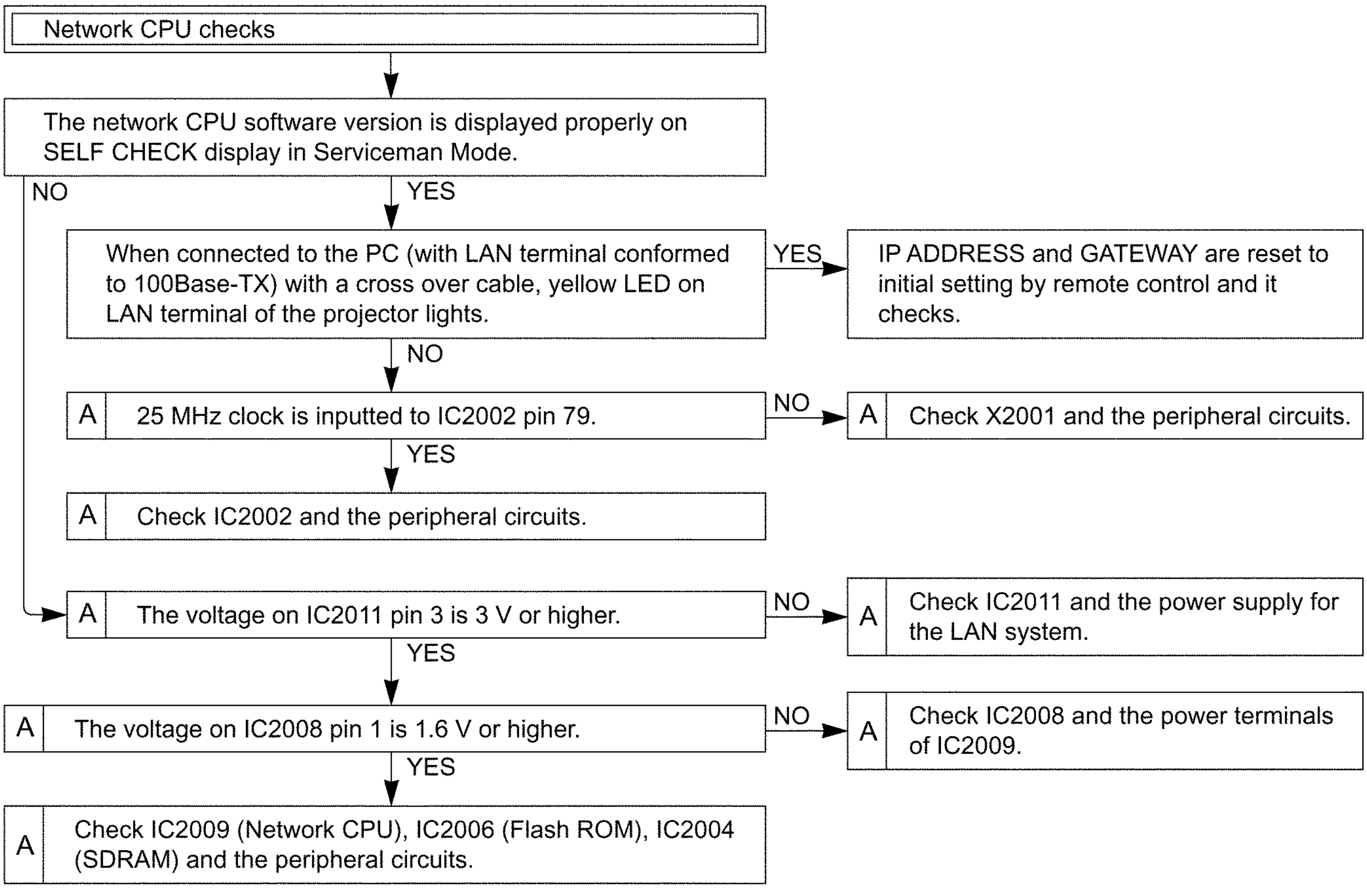
NG → A Repair or replace the defective component.

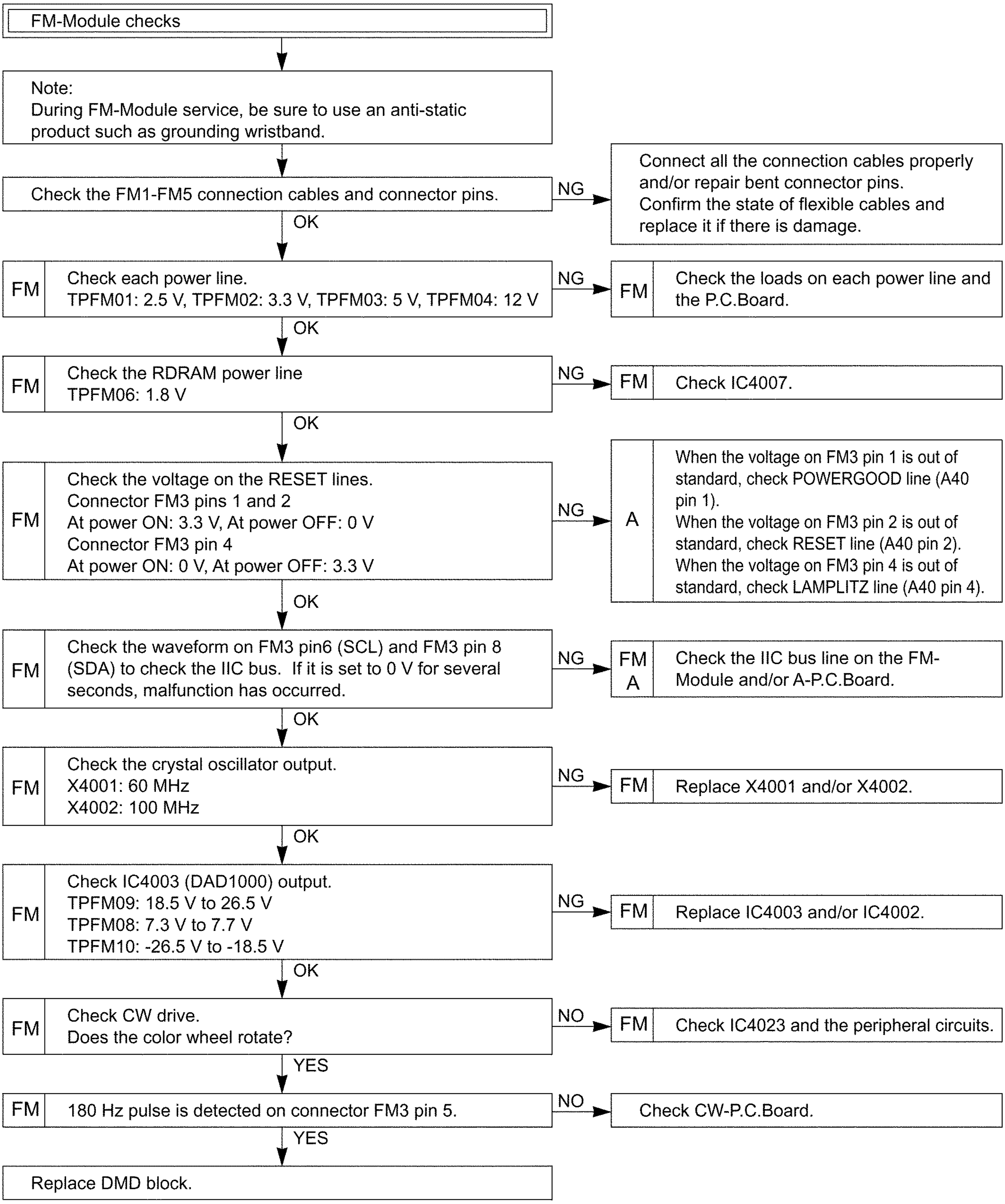
OK

Follow the section "FM-Module checks".


Main CPU checks
All status LEDs (TEMP, LAMP1, LAMP2 and POWER) light when turning on the MAIN POWER switch, and they turn off afterwards.
NO
YES
A Check the waveform on IC2503 pin 3 (CPUSDA).
NG
A Check IC2503 and the peripheral circuits.
OK
A Check the waveform on IC2502 pin 3 (CPUSCL).
NG
A Check IC2502 and the peripheral circuits.
OK
A Check IC2507 (Main CPU), IC2503 (IIC selector), IC2502 (IIC selector) and the peripheral circuits.
A The voltage on IC2506 (Reset IC) pin 6 is 3 V or higher.
NO
A Check IC2506 and the peripheral circuits.
YES
A X2501 oscillates in 9.8 MHz.
NO
A Check X2501 and the peripheral circuits.
YES
A The pins for LED of IC2516/IC2517 operate.
NO
A Check IC2516, IC2517 and the peripheral circuits.
YES
A Check IC2507 (Main CPU), IC2509 (Flash ROM), IC2511 (SRAM) and the peripheral circuits.


Real Time Clock checks
The date becomes abnormal when date setting is executed and MAIN POWER switch is turned off.
NO
YES
A B2501 (Battery) voltage is 2.2 V or higher.
NO
A Replace B2501 (Battery).
YES
A Check IC2524 and the peripheral circuits.


Network CPU checks
The network CPU software version is displayed properly on SELF CHECK display in Serviceman Mode.
NO
YES
When connected to the PC (with LAN terminal conformed to 100Base-TX) with a cross over cable, yellow LED on LAN terminal of the projector lights.
YES
IP ADDRESS and GATEWAY are reset to initial setting by remote control and it checks.
NO
A 25 MHz clock is inputted to IC2002 pin 79.
NO
A Check X2001 and the peripheral circuits.
YES
A Check IC2002 and the peripheral circuits.
A The voltage on IC2011 pin 3 is 3 V or higher.
NO
A Check IC2011 and the power supply for the LAN system.
YES
A The voltage on IC2008 pin 1 is 1.6 V or higher.
NO
A Check IC2008 and the power terminals of IC2009.
YES
A Check IC2009 (Network CPU), IC2006 (Flash ROM), IC2004 (SDRAM) and the peripheral circuits.



FM-Module checks

Note:
During FM-Module service, be sure to use an anti-static product such as grounding wristband.

Check the FM1-FM5 connection cables and connector pins.
NG → Connect all the connection cables properly and/or repair bent connector pins. Confirm the state of flexible cables and replace it if there is damage.
OK ↓

FM | Check each power line.
TPFM01: 2.5 V, TPFM02: 3.3 V, TPFM03: 5 V, TPFM04: 12 V
NG → FM | Check the loads on each power line and the P.C.Board.
OK ↓

FM | Check the RDRAM power line
TPFM06: 1.8 V
NG → FM | Check IC4007.
OK ↓

FM | Check the voltage on the RESET lines.
Connector FM3 pins 1 and 2
At power ON: 3.3 V, At power OFF: 0 V
Connector FM3 pin 4
At power ON: 0 V, At power OFF: 3.3 V
NG → A | When the voltage on FM3 pin 1 is out of standard, check POWERGOOD line (A40 pin 1).
When the voltage on FM3 pin 2 is out of standard, check RESET line (A40 pin 2).
When the voltage on FM3 pin 4 is out of standard, check LAMPLITZ line (A40 pin 4).
OK ↓

FM | Check the waveform on FM3 pin6 (SCL) and FM3 pin 8 (SDA) to check the IIC bus. If it is set to 0 V for several seconds, malfunction has occurred.
NG → FM A | Check the IIC bus line on the FM-Module and/or A-P.C.Board.
OK ↓

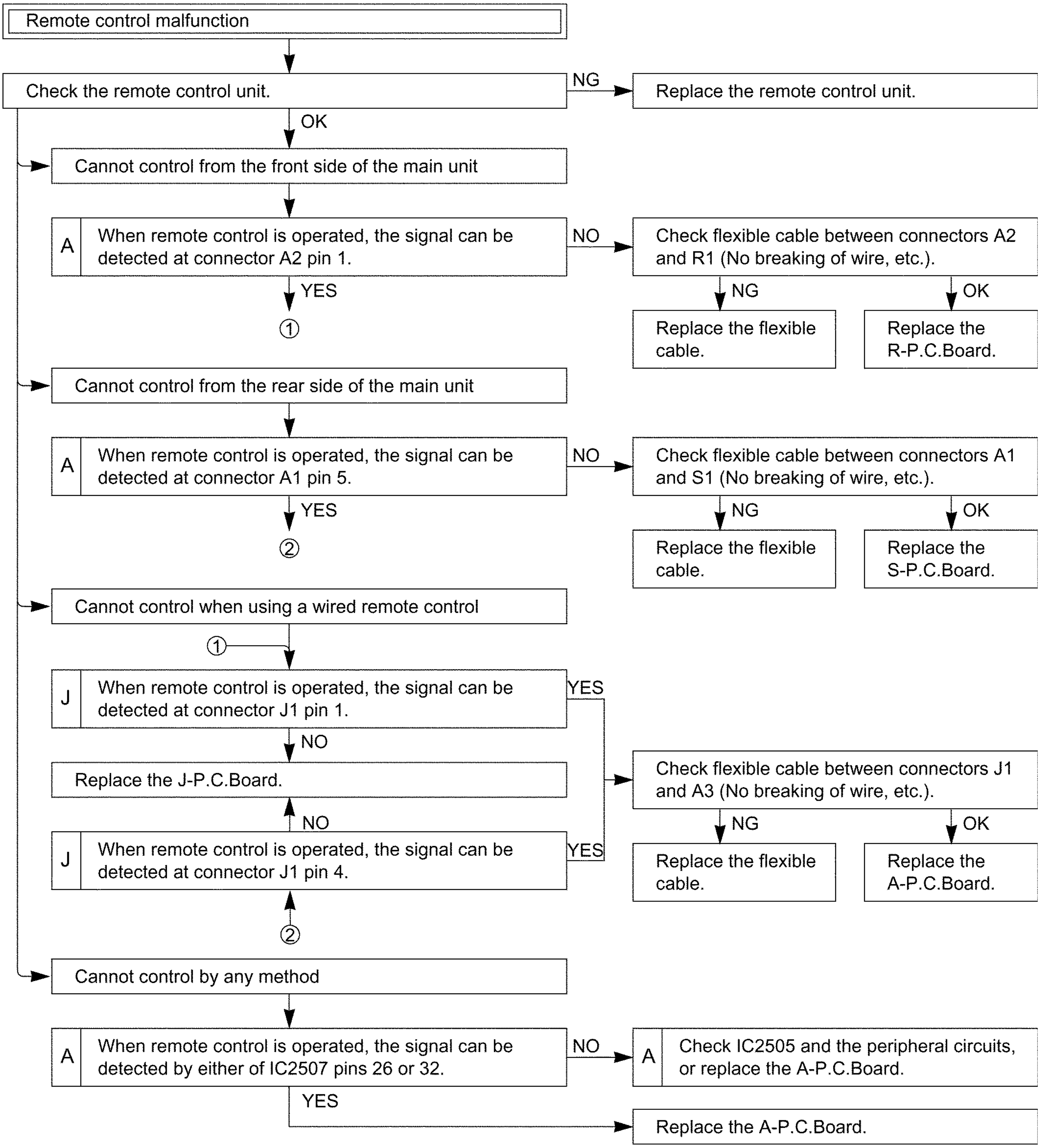
FM | Check the crystal oscillator output.
X4001: 60 MHz
X4002: 100 MHz
NG → FM | Replace X4001 and/or X4002.
OK ↓

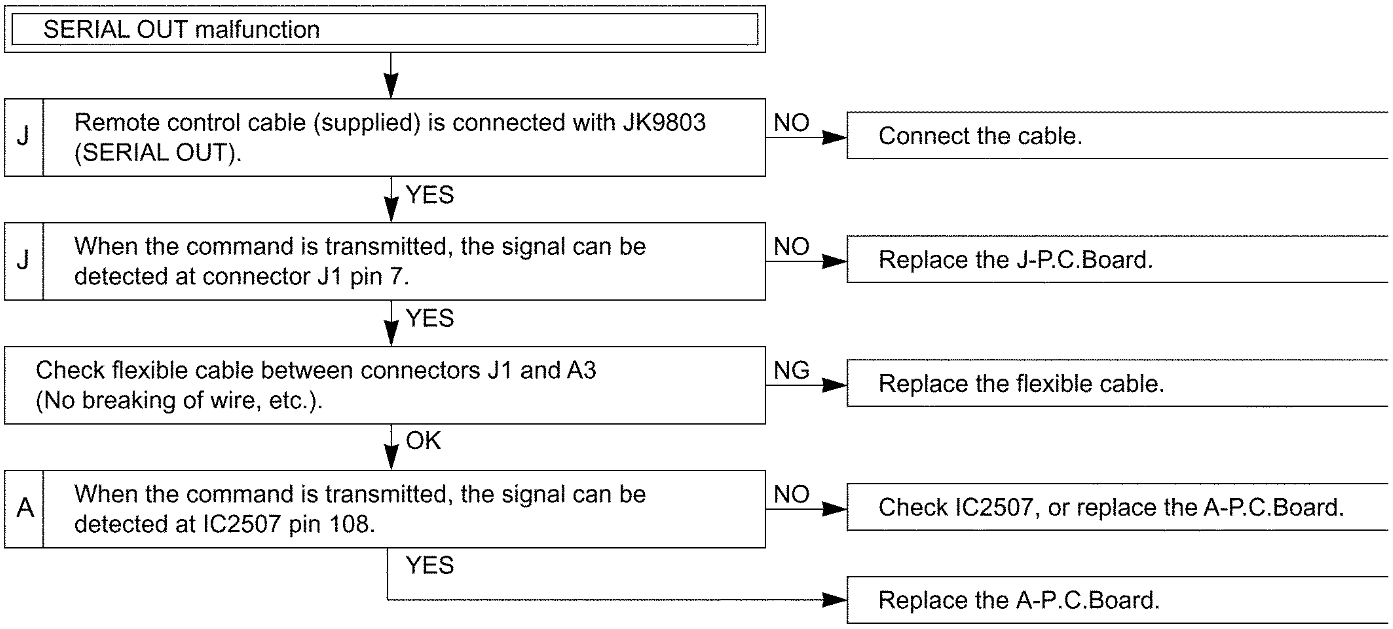
FM | Check IC4003 (DAD1000) output.
TPFM09: 18.5 V to 26.5 V
TPFM08: 7.3 V to 7.7 V
TPFM10: -26.5 V to -18.5 V
NG → FM | Replace IC4003 and/or IC4002.
OK ↓

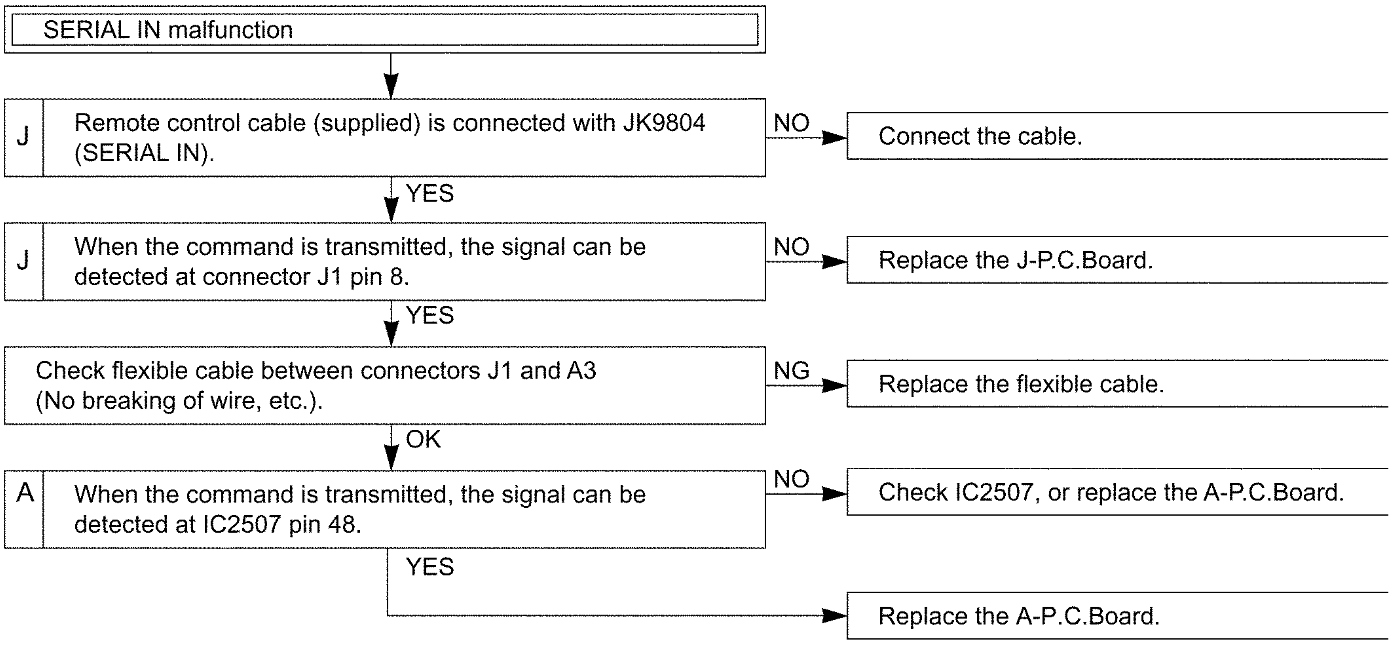
FM | Check CW drive.
Does the color wheel rotate?
NO → FM | Check IC4023 and the peripheral circuits.
YES ↓

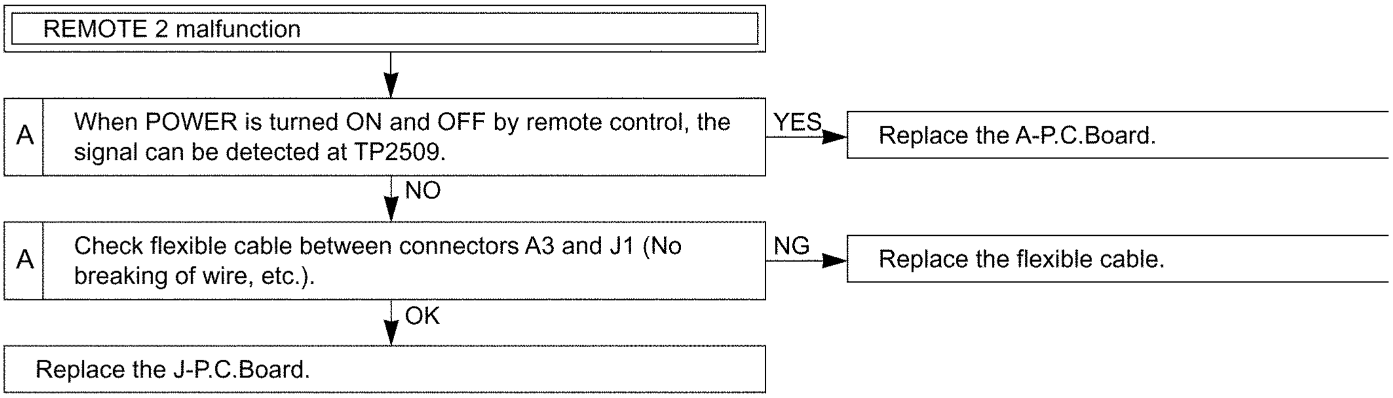
FM | 180 Hz pulse is detected on connector FM3 pin 5.
NO → Check CW-P.C.Board.
YES ↓

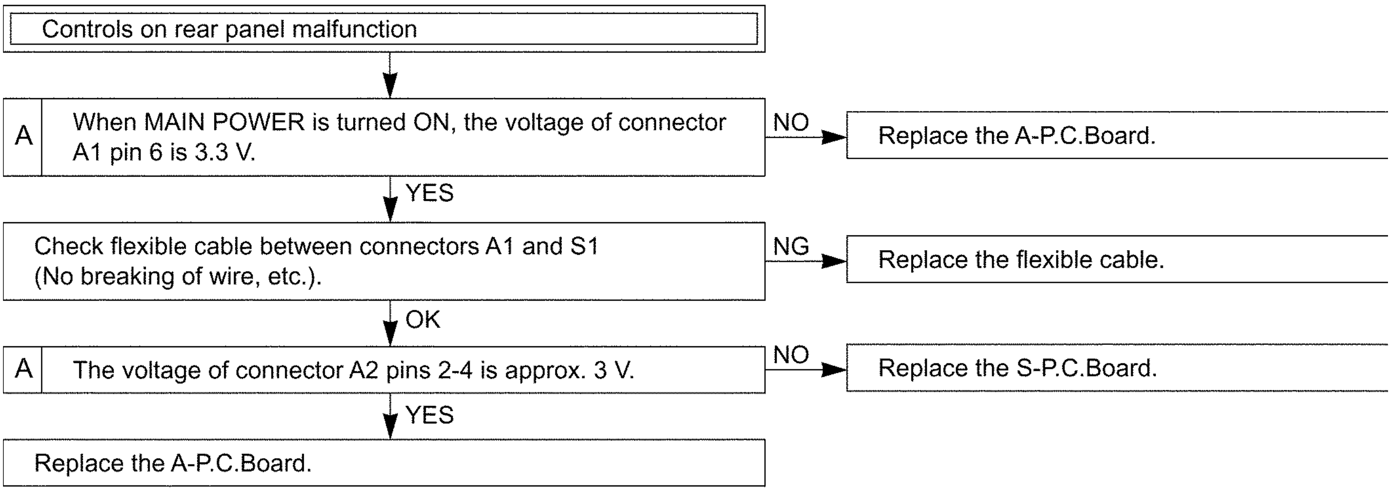
Replace DMD block.

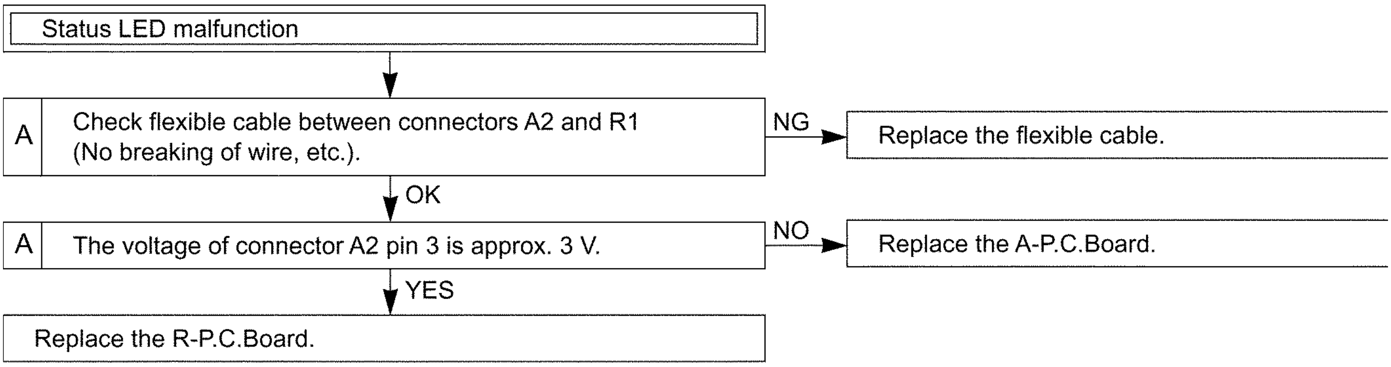

Remote control malfunction
Check the remote control unit.
NG
Replace the remote control unit.
OK
Cannot control from the front side of the main unit
A
When remote control is operated, the signal can be detected at connector A2 pin 1.
NO
Check flexible cable between connectors A2 and R1 (No breaking of wire, etc.).
YES
①
NG
OK
Replace the flexible cable.
Replace the R-P.C.Board.
Cannot control from the rear side of the main unit
A
When remote control is operated, the signal can be detected at connector A1 pin 5.
NO
Check flexible cable between connectors A1 and S1 (No breaking of wire, etc.).
YES
②
NG
OK
Replace the flexible cable.
Replace the S-P.C.Board.
Cannot control when using a wired remote control
①
J
When remote control is operated, the signal can be detected at connector J1 pin 1.
YES
NO
Replace the J-P.C.Board.
Check flexible cable between connectors J1 and A3 (No breaking of wire, etc.).
NO
NG
OK
J
When remote control is operated, the signal can be detected at connector J1 pin 4.
YES
Replace the flexible cable.
Replace the A-P.C.Board.
②
Cannot control by any method
A
When remote control is operated, the signal can be detected by either of IC2507 pins 26 or 32.
NO
A
Check IC2505 and the peripheral circuits, or replace the A-P.C.Board.
YES
Replace the A-P.C.Board.


SERIAL OUT malfunction
J
Remote control cable (supplied) is connected with JK9803 (SERIAL OUT).
NO
Connect the cable.
YES
J
When the command is transmitted, the signal can be detected at connector J1 pin 7.
NO
Replace the J-P.C.Board.
YES
Check flexible cable between connectors J1 and A3 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
A
When the command is transmitted, the signal can be detected at IC2507 pin 108.
NO
Check IC2507, or replace the A-P.C.Board.
YES
Replace the A-P.C.Board.


SERIAL IN malfunction
J
Remote control cable (supplied) is connected with JK9804 (SERIAL IN).
NO
Connect the cable.
YES
J
When the command is transmitted, the signal can be detected at connector J1 pin 8.
NO
Replace the J-P.C.Board.
YES
Check flexible cable between connectors J1 and A3 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
A
When the command is transmitted, the signal can be detected at IC2507 pin 48.
NO
Check IC2507, or replace the A-P.C.Board.
YES
Replace the A-P.C.Board.

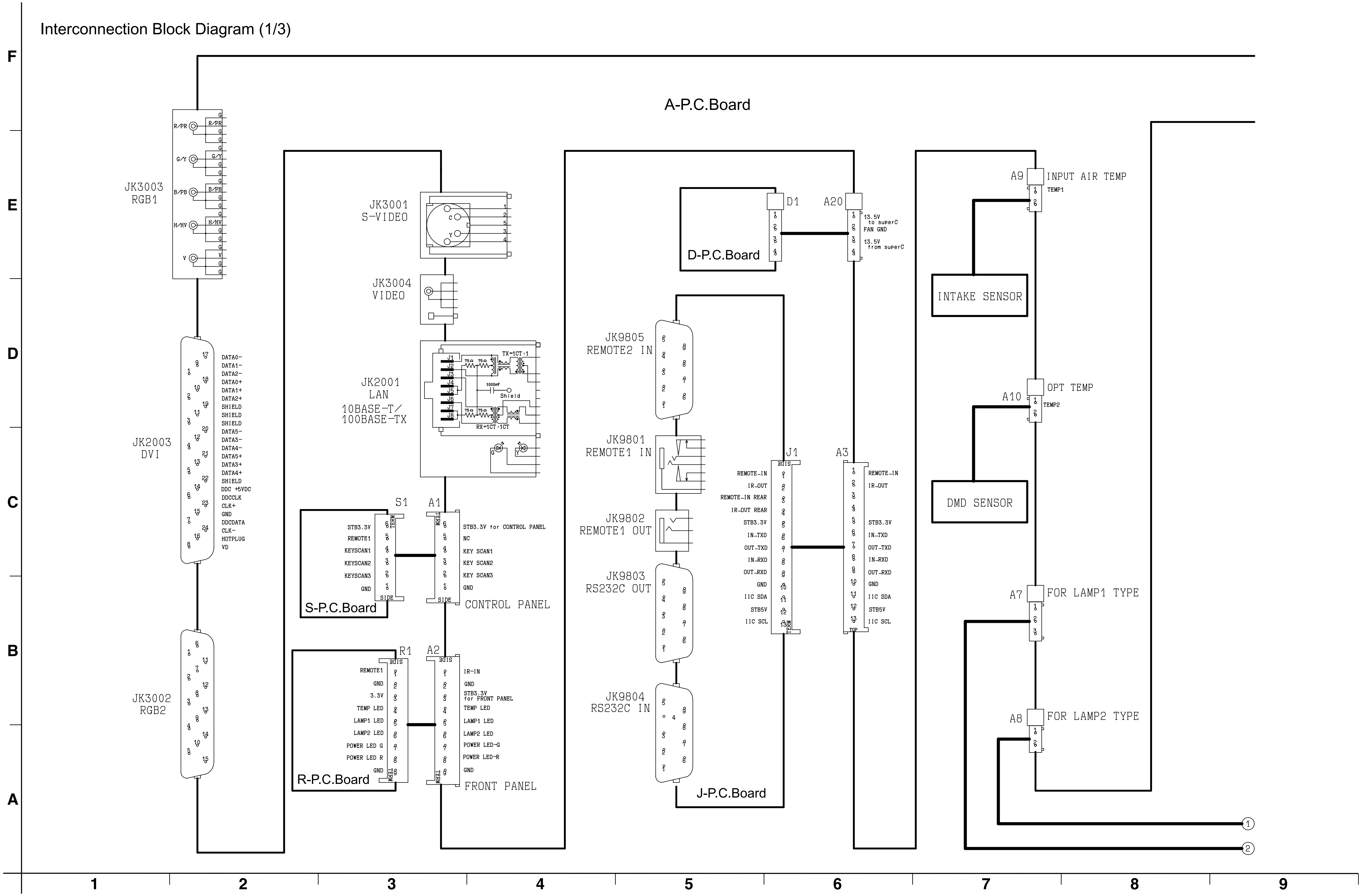

REMOTE 2 malfunction
A
When POWER is turned ON and OFF by remote control, the signal can be detected at TP2509.
YES
Replace the A-P.C.Board.
NO
A
Check flexible cable between connectors A3 and J1 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
Replace the J-P.C.Board.


Controls on rear panel malfunction
A
When MAIN POWER is turned ON, the voltage of connector A1 pin 6 is 3.3 V.
NO
Replace the A-P.C.Board.
YES
Check flexible cable between connectors A1 and S1 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
A
The voltage of connector A2 pins 2-4 is approx. 3 V.
NO
Replace the S-P.C.Board.
YES
Replace the A-P.C.Board.

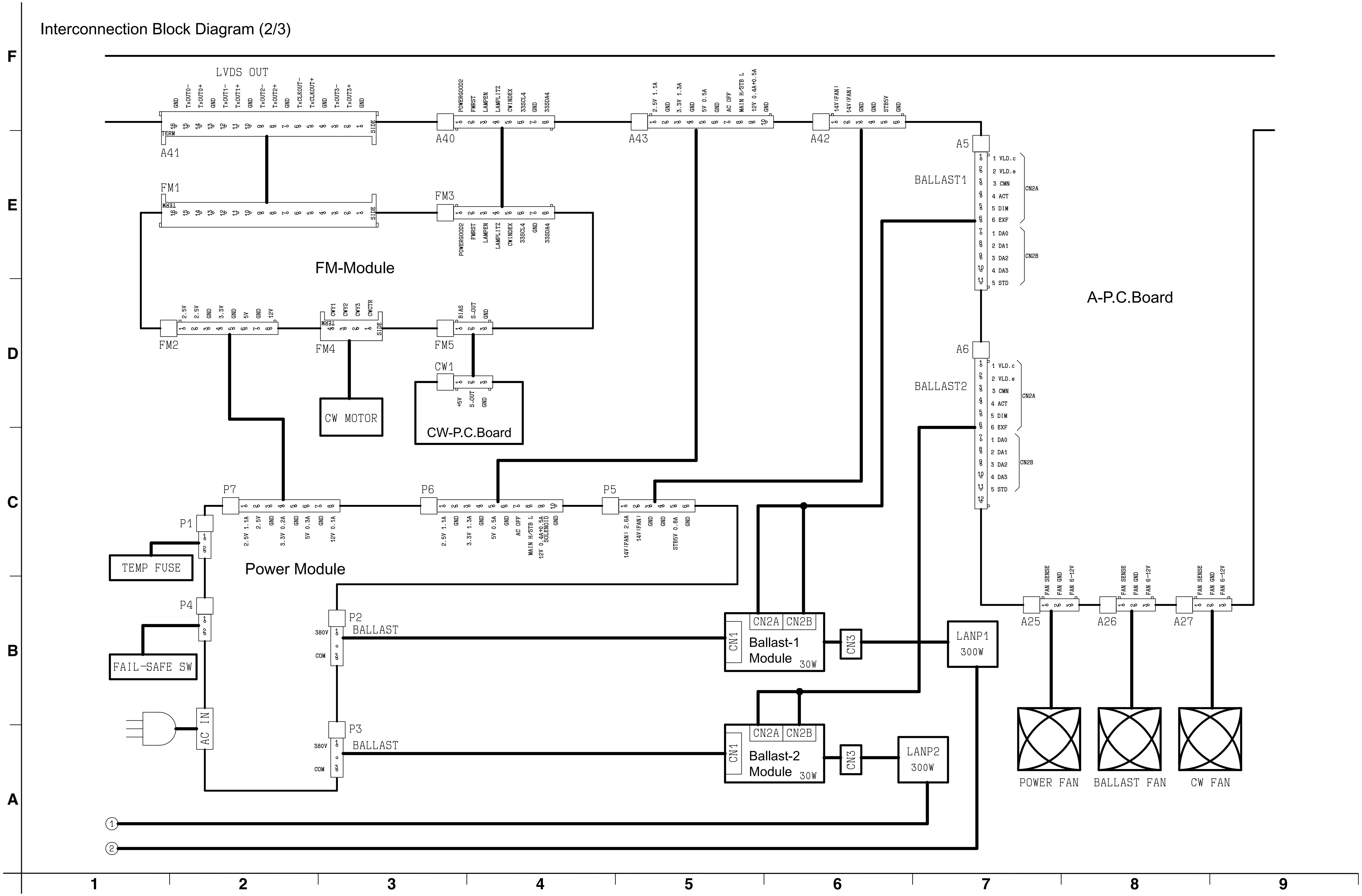

Status LED malfunction
A
Check flexible cable between connectors A2 and R1 (No breaking of wire, etc.).
NG
Replace the flexible cable.
OK
A
The voltage of connector A2 pin 3 is approx. 3 V.
NO
Replace the A-P.C.Board.
YES
Replace the R-P.C.Board.

13 Interconnection Block Diagram

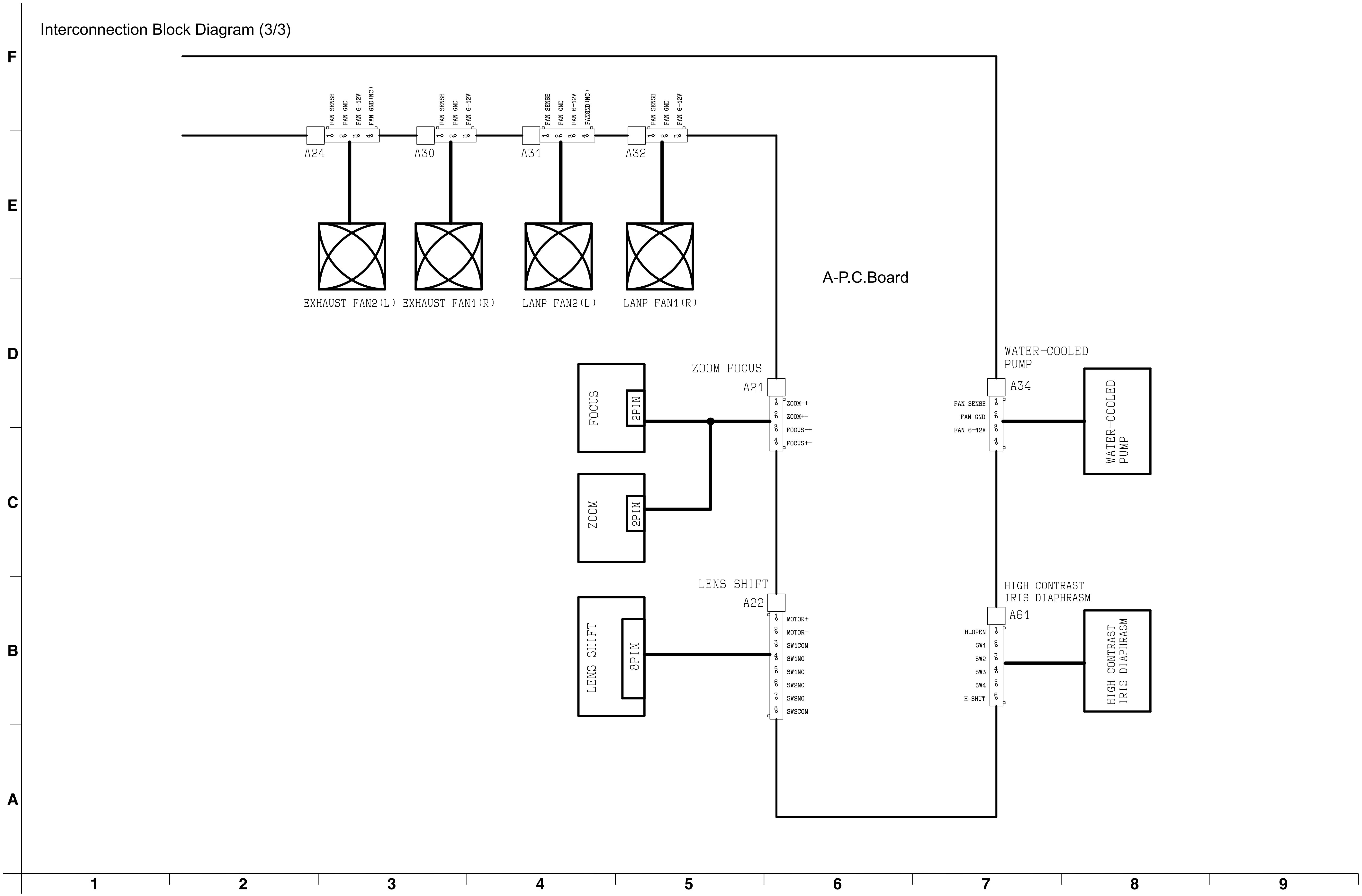
13.1. Interconnection Block Diagram (1/3)


Interconnection Block Diagram (1/3)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
A-P.C.Board
JK3003
RGB1
R/PR
G/Y
B/PB
H/HV
V
G
JK2003
DVI
DATA0-
DATA1-
DATA2-
DATA0+
DATA1+
DATA2+
SHIELD
SHIELD
SHIELD
DATA5-
DATA3-
DATA4-
DATA5+
DATA3+
DATA4+
SHIELD
DDC +5VDC
DDCCLK
CLK+
GND
DDCDATA
CLK-
HOTPLUG
VD
JK3002
RGB2
JK3001
S-VIDEO
C
Y
JK3004
VIDEO
JK2001
LAN
10BASE-T/
100BASE-TX
J1
J2
J3
J4
J5
J6
J7
J8
75Ω
TX=1CT:1
1000pF
Shield
RX=1CT:1CT
G
Y
S1
A1
STB3.3V
REMOTE1
KEYSCAN1
KEYSCAN2
KEYSCAN3
GND
TERM
SIDE
S-P.C.Board
STB3.3V for CONTROL PANEL
NC
KEY SCAN1
KEY SCAN2
KEY SCAN3
GND
CONTROL PANEL
R1
A2
REMOTE1
GND
3.3V
TEMP LED
LAMP1 LED
LAMP2 LED
POWER LED G
POWER LED R
GND
R-P.C.Board
IR-IN
GND
STB3.3V
for FRONT PANEL
TEMP LED
LAMP1 LED
LAMP2 LED
POWER LED-G
POWER LED-R
GND
FRONT PANEL
D-P.C.Board
D1
A20
13.5V
to superC
FAN GND
13.5V
from superC
JK9805
REMOTE2 IN
JK9801
REMOTE1 IN
JK9802
REMOTE1 OUT
JK9803
RS232C OUT
JK9804
RS232C IN
J-P.C.Board
J1
A3
REMOTE-IN
IR-OUT
REMOTE-IN REAR
IR-OUT REAR
STB3.3V
IN-TXD
OUT-TXD
IN-RXD
OUT-RXD
GND
IIC SDA
STB5V
IIC SCL
TOP
A9
INPUT AIR TEMP
TEMP1
INTAKE SENSOR
A10
OPT TEMP
TEMP2
DMD SENSOR
A7
FOR LAMP1 TYPE
A8
FOR LAMP2 TYPE
①
②

13.2. Interconnection Block Diagram (2/3)

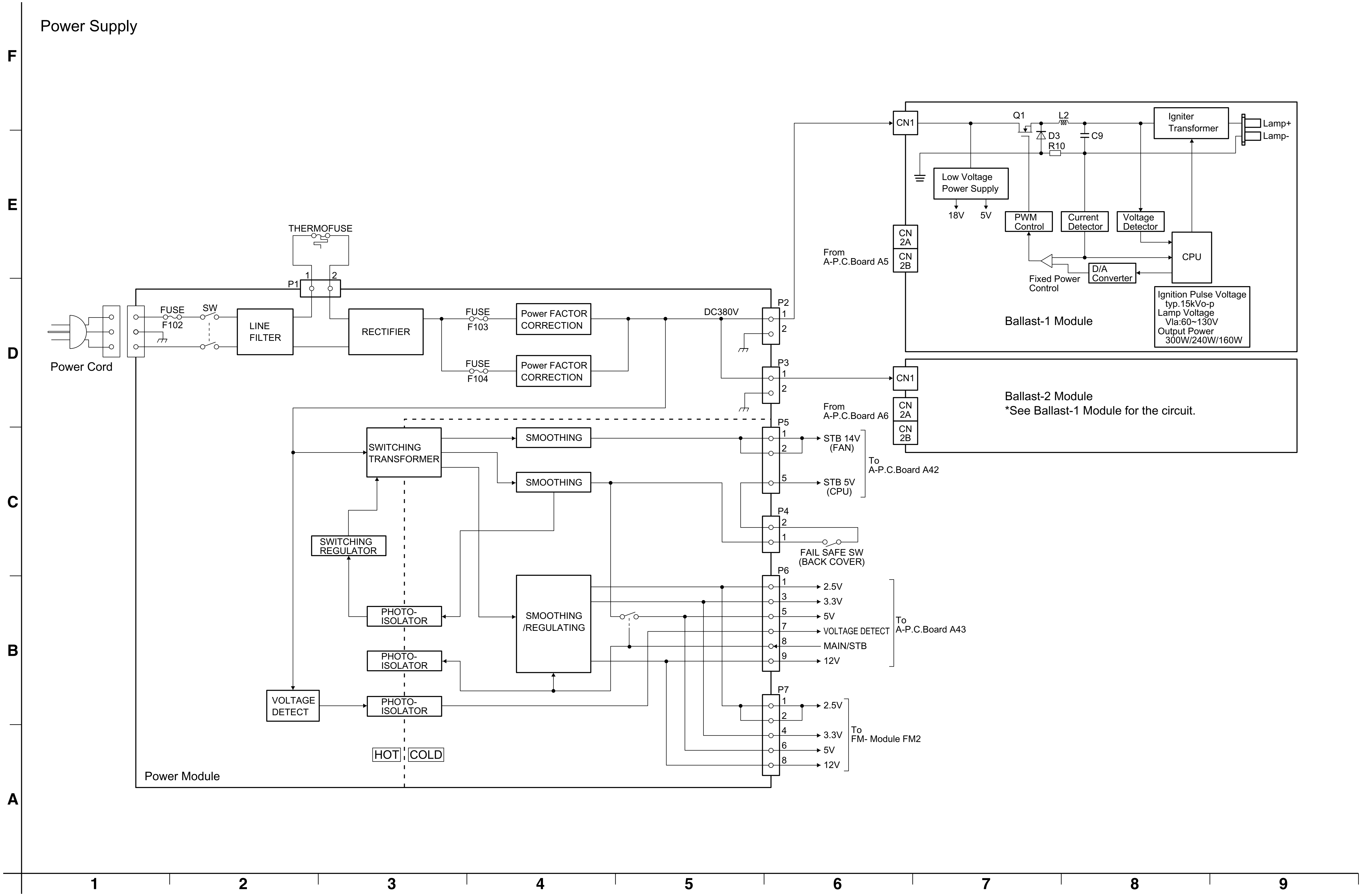

Interconnection Block Diagram (2/3)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
LVDS OUT
GND
TxOUT0-
TxOUT0+
GND
TxOUT1-
TxOUT1+
GND
TxOUT2-
TxOUT2+
GND
TxCLKOUT-
TxCLKOUT+
GND
TxOUT3-
TxOUT3+
GND
TERM
SIDE
A41
A40
POWERGOOD2
FMRST
LAMPEN
LAMPLIT2
CWINDEX
33SCL4
GND
33SDA4
A43
2.5V 1.1A
GND
3.3V 1.3A
GND
5V 0.5A
GND
AC OFF
MAIN H/STB L
12V 0.4A+0.5A
GND
A42
14V(FAN)
14V(FAN)
GND
GND
STB5V
GND
A5
BALLAST1
1 VLD.c
2 VLD.e
3 CMN
4 ACT
5 DIM
6 EXF
CN2A
1 DA0
2 DA1
3 DA2
4 DA3
5 STD
CN2B
FM1
FM3
FM-Module
A-P.C.Board
FM2
2.5V
2.5V
GND
3.3V
GND
5V
GND
12V
FM4
CW1
CW2
CW3
CWCTR
FM5
BIAS
S_OUT
GND
CW1
+5V
S_OUT
GND
CW MOTOR
CW-P.C.Board
A6
BALLAST2
P7
2.5V 1.1A
2.5V
GND
3.3V 0.2A
GND
5V 0.3A
GND
12V 0.1A
P6
2.5V 1.1A
GND
3.3V 1.3A
GND
5V 0.5A
GND
AC OFF
MAIN H/STB L
12V 0.4A+0.5A SOLENOID
GND
P5
14V(FAN) 2.6A
14V(FAN)
GND
GND
STB5V 0.8A
GND
P1
TEMP FUSE
Power Module
P4
FAIL-SAFE SW
AC IN
P2
380V
COM
BALLAST
P3
380V
COM
BALLAST
CN1
CN2A
CN2B
Ballast-1 Module
30W
CN3
LANP1 300W
CN1
CN2A
CN2B
Ballast-2 Module
30W
CN3
LANP2 300W
FAN SENSE
FAN GND
FAN 6-12V
A25
A26
A27
POWER FAN
BALLAST FAN
CW FAN
①
②

13.3. Interconnection Block Diagram (3/3)

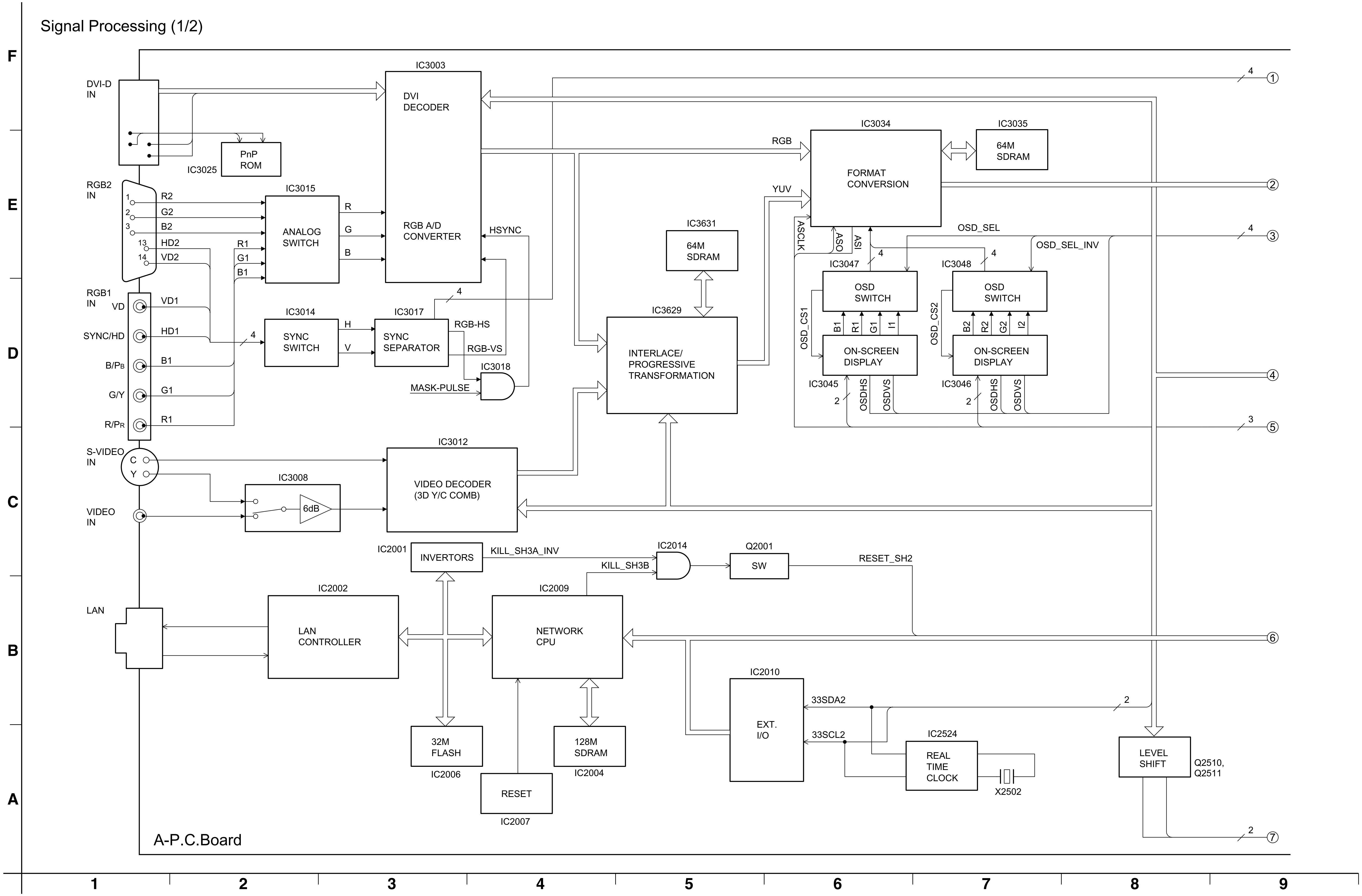

Interconnection Block Diagram (3/3)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
FAN SENSE
FAN GND
FAN 6-12V
FAN GND(NC)
1
2
3
4
A24
FAN SENSE
FAN GND
FAN 6-12V
1
2
3
A30
FAN SENSE
FAN GND
FAN 6-12V
FANGND(NC)
1
2
3
4
A31
FAN SENSE
FAN GND
FAN 6-12V
1
2
3
A32
EXHAUST FAN2(L)
EXHAUST FAN1(R)
LANP FAN2(L)
LANP FAN1(R)
A-P.C.Board
ZOOM FOCUS
A21
1 ZOOM-+
2 ZOOM+-
3 FOCUS-+
4 FOCUS+-
FOCUS
2PIN
ZOOM
2PIN
LENS SHIFT
A22
1 MOTOR+
2 MOTOR-
3 SW1COM
4 SW1NO
5 SW1NC
6 SW2NC
7 SW2NO
8 SW2COM
LENS SHIFT
8PIN
WATER-COOLED
PUMP
A34
FAN SENSE 1
FAN GND 2
FAN 6-12V 3
4
WATER-COOLED
PUMP
HIGH CONTRAST
IRIS DIAPHRASM
A61
H_OPEN 1
SW1 2
SW2 3
SW3 4
SW4 5
H_SHUT 6
HIGH CONTRAST
IRIS DIAPHRASM

14 Block Diagram

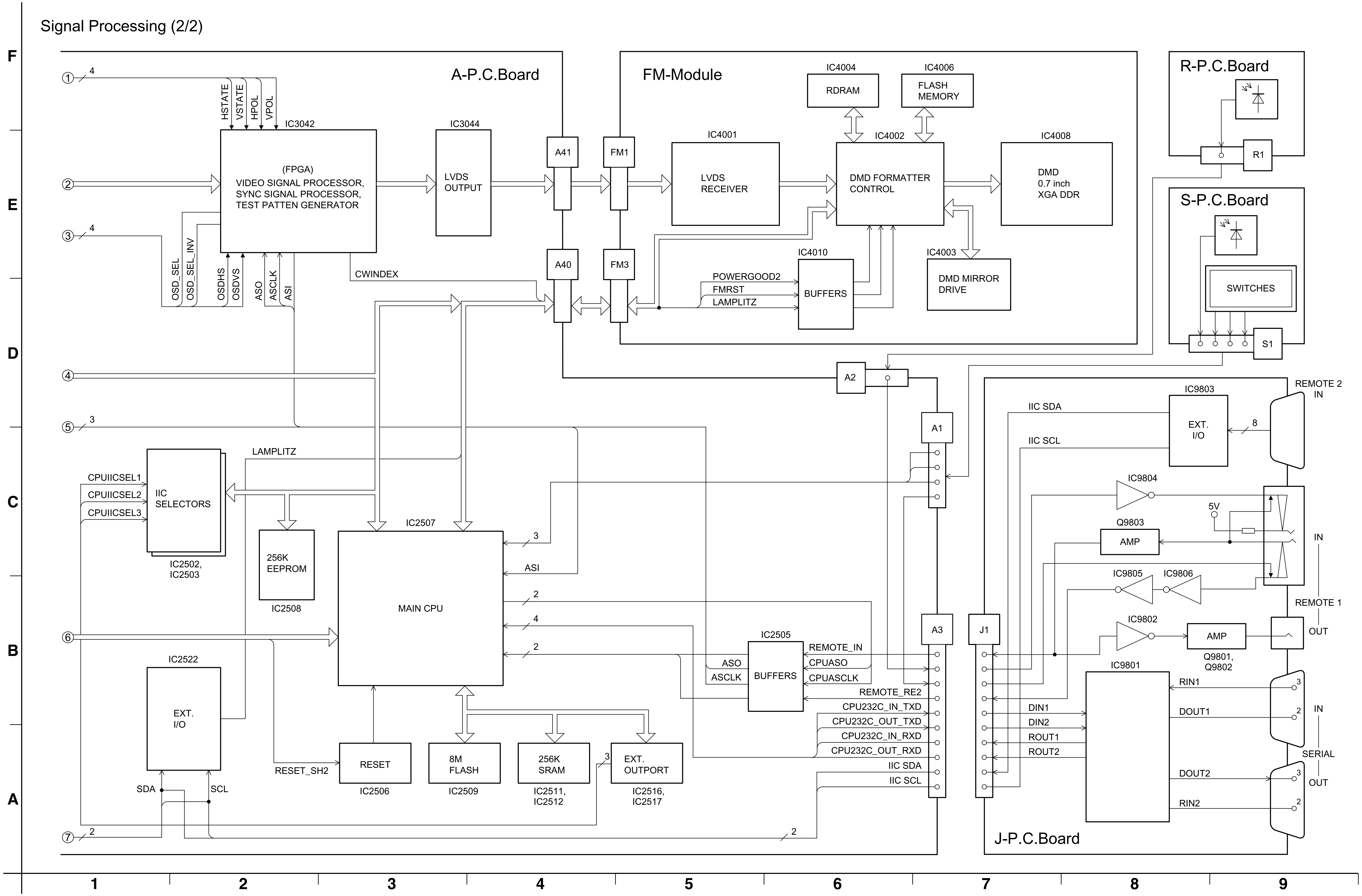
14.1. Power Supply


Power Supply
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
Power Cord
FUSE
F102
SW
LINE FILTER
THERMOFUSE
P1
1
2
RECTIFIER
FUSE
F103
FUSE
F104
Power FACTOR CORRECTION
Power FACTOR CORRECTION
DC380V
P2
P3
SWITCHING TRANSFORMER
SMOOTHING
SMOOTHING
SWITCHING REGULATOR
PHOTO-ISOLATOR
PHOTO-ISOLATOR
PHOTO-ISOLATOR
VOLTAGE DETECT
SMOOTHING /REGULATING
HOT
COLD
Power Module
P5
STB 14V (FAN)
STB 5V (CPU)
To A-P.C.Board A42
P4
FAIL SAFE SW (BACK COVER)
P6
2.5V
3.3V
5V
VOLTAGE DETECT
MAIN/STB
12V
To A-P.C.Board A43
P7
2.5V
3.3V
5V
12V
To FM- Module FM2
CN1
CN 2A
CN 2B
From A-P.C.Board A5
Q1
L2
D3
R10
C9
Igniter Transformer
Lamp+
Lamp-
Low Voltage Power Supply
18V
5V
PWM Control
Current Detector
Voltage Detector
CPU
D/A Converter
Fixed Power Control
Ignition Pulse Voltage typ.15kVo-p
Lamp Voltage Vla:60~130V
Output Power 300W/240W/160W
Ballast-1 Module
CN1
CN 2A
CN 2B
From A-P.C.Board A6
Ballast-2 Module
*See Ballast-1 Module for the circuit.

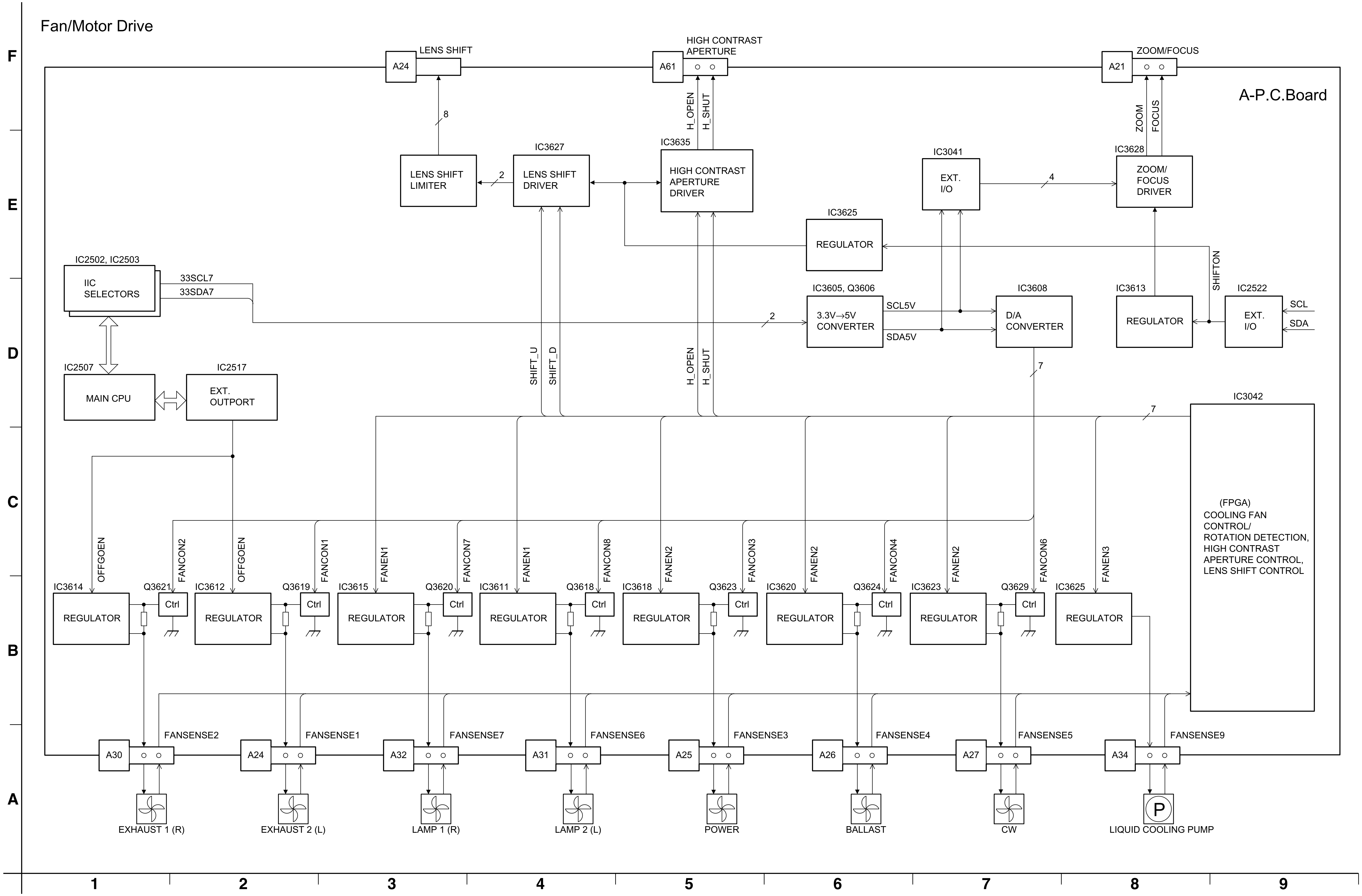
14.2. Signal Processing (1/2)


Signal Processing (1/2)
DVI-D IN
IC3003
DVI DECODER
RGB A/D CONVERTER
PnP ROM
IC3025
RGB2 IN
1
2
3
13
14
R2
G2
B2
HD2
VD2
IC3015
ANALOG SWITCH
R1
G1
B1
R
G
B
HSYNC
RGB1 IN
VD
SYNC/HD
B/PB
G/Y
R/PR
VD1
HD1
B1
G1
R1
4
IC3014
SYNC SWITCH
H
V
IC3017
SYNC SEPARATOR
RGB-HS
RGB-VS
IC3018
MASK-PULSE
S-VIDEO IN
C
Y
IC3008
6dB
VIDEO IN
IC3012
VIDEO DECODER (3D Y/C COMB)
IC3631
64M SDRAM
IC3629
INTERLACE/ PROGRESSIVE TRANSFORMATION
RGB
YUV
IC3034
FORMAT CONVERSION
IC3035
64M SDRAM
ASCLK
ASO
ASI
OSD_SEL
OSD_SEL_INV
IC3047
IC3048
OSD SWITCH
OSD SWITCH
OSD_CS1
OSD_CS2
B1
R1
G1
I1
B2
R2
G2
I2
ON-SCREEN DISPLAY
ON-SCREEN DISPLAY
IC3045
IC3046
OSDHS
OSDVS
2
3
①
②
③
④
⑤
⑥
⑦
IC2001
INVERTORS
KILL_SH3A_INV
KILL_SH3B
IC2014
Q2001
SW
RESET_SH2
LAN
IC2002
LAN CONTROLLER
IC2009
NETWORK CPU
32M FLASH
IC2006
RESET
IC2007
128M SDRAM
IC2004
IC2010
EXT. I/O
33SDA2
33SCL2
IC2524
REAL TIME CLOCK
X2502
LEVEL SHIFT
Q2510, Q2511
A-P.C.Board
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

14.3. Signal Processing (2/2)


Signal Processing (2/2)
A-P.C.Board
FM-Module
R-P.C.Board
S-P.C.Board
J-P.C.Board
IC3042
(FPGA)
VIDEO SIGNAL PROCESSOR,
SYNC SIGNAL PROCESSOR,
TEST PATTEN GENERATOR
HSTATE
VSTATE
HPOL
VPOL
OSD_SEL
OSD_SEL_INV
OSDHS
OSDVS
ASO
ASCLK
ASI
CWINDEX
IC3044
LVDS
OUTPUT
A41
A40
FM1
FM3
IC4001
LVDS
RECEIVER
IC4004
RDRAM
IC4006
FLASH
MEMORY
IC4002
DMD FORMATTER
CONTROL
IC4008
DMD
0.7 inch
XGA DDR
IC4010
BUFFERS
POWERGOOD2
FMRST
LAMPLITZ
IC4003
DMD MIRROR
DRIVE
R1
SWITCHES
S1
A2
A1
A3
J1
LAMPLITZ
CPUIICSEL1
CPUIICSEL2
CPUIICSEL3
IIC
SELECTORS
IC2502,
IC2503
256K
EEPROM
IC2508
IC2507
MAIN CPU
ASI
IC2522
EXT.
I/O
SDA
SCL
RESET_SH2
RESET
IC2506
8M
FLASH
IC2509
256K
SRAM
IC2511,
IC2512
EXT.
OUTPORT
IC2516,
IC2517
IC2505
BUFFERS
ASO
ASCLK
REMOTE_IN
CPUASO
CPUASCLK
REMOTE_RE2
CPU232C_IN_TXD
CPU232C_OUT_TXD
CPU232C_IN_RXD
CPU232C_OUT_RXD
IIC SDA
IIC SCL
IIC SDA
IIC SCL
IC9803
EXT.
I/O
REMOTE 2
IN
IC9804
5V
Q9803
AMP
IN
IC9805
IC9806
REMOTE 1
IC9802
AMP
Q9801,
Q9802
OUT
IC9801
RIN1
DOUT1
DIN1
DIN2
ROUT1
ROUT2
DOUT2
RIN2
IN
SERIAL
OUT
①
②
③
④
⑤
⑥
⑦
4
4
3
2
3
2
4
2
3
2
8
3
2
3
2
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

14.4. Fan/Motor Drive


Fan/Motor Drive
A-P.C.Board
A24
LENS SHIFT
A61
HIGH CONTRAST APERTURE
A21
ZOOM/FOCUS
8
H_OPEN
H_SHUT
ZOOM
FOCUS
IC3627
IC3635
IC3041
IC3628
LENS SHIFT LIMITER
2
LENS SHIFT DRIVER
HIGH CONTRAST APERTURE DRIVER
EXT. I/O
4
ZOOM/ FOCUS DRIVER
IC3625
REGULATOR
IC2502, IC2503
IIC SELECTORS
33SCL7
33SDA7
IC3605, Q3606
3.3V→5V CONVERTER
SCL5V
SDA5V
IC3608
D/A CONVERTER
IC3613
REGULATOR
SHIFTON
IC2522
EXT. I/O
SCL
SDA
IC2507
MAIN CPU
IC2517
EXT. OUTPORT
SHIFT_U
SHIFT_D
7
IC3042
(FPGA)
COOLING FAN CONTROL/
ROTATION DETECTION,
HIGH CONTRAST APERTURE CONTROL,
LENS SHIFT CONTROL
OFFGOEN
FANCON2
OFFGOEN
FANCON1
FANEN1
FANCON7
FANEN1
FANCON8
FANEN2
FANCON3
FANEN2
FANCON4
FANEN2
FANCON6
FANEN3
IC3614
Q3621
IC3612
Q3619
IC3615
Q3620
IC3611
Q3618
IC3618
Q3623
IC3620
Q3624
IC3623
Q3629
IC3625
REGULATOR
Ctrl
A30
FANSENSE2
A24
FANSENSE1
A32
FANSENSE7
A31
FANSENSE6
A25
FANSENSE3
A26
FANSENSE4
A27
FANSENSE5
A34
FANSENSE9
P
EXHAUST 1 (R)
EXHAUST 2 (L)
LAMP 1 (R)
LAMP 2 (L)
POWER
BALLAST
CW
LIQUID COOLING PUMP
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

15 Schematic Diagram

Schematic Diagram for Model PT-D5500U/UL

IMPORTANT SAFETY NOTICE

THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM FIRE AND ELECTRICAL SHOCK HAZARDS.
WHEN SERVICING, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

Schematic Diagram for Model PT-D5500E/EL

Important Safety Notice

Components identified by the international symbol ⚠ have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified ones.

Notes:

1. **Resistor**
   All the resistors are carbon 1/4W resistors, unless marked as follows: The unit of resistance is an OHM [Ω] (K=1 000 M=1 000 000).
   ○ : Nonflammable
   △ : Solid
   ⧄ : Wire Wound
   ⊠ : Metal Oxide
   ◎ : Metal Film
   ⊗ : Fuse
2. **Capacitor**
   ⊗ : Temperature Compensation
   Ⓜ : Polyester
   ⓜ : Metalized Polyester
   ⊠ : Polypropylene
   +⊣⊢− : Electrolytic
   NP ⊣⊢ : Bipolar
   Ⓣ : Dipped Tantalum
   Ⓩ : Z-Type
3. **Coil**
   The unit of inductance is a H, unless otherwise noted.
4. **Test Point**
   ● : Test Point
5. **Voltage Measurement**
   The voltage is measured by an electronic voltmeter receiving the colorbar signal when all the customer's controls are set to the standard condition.
6. **Color code for the links between diagrams and circuit boards**

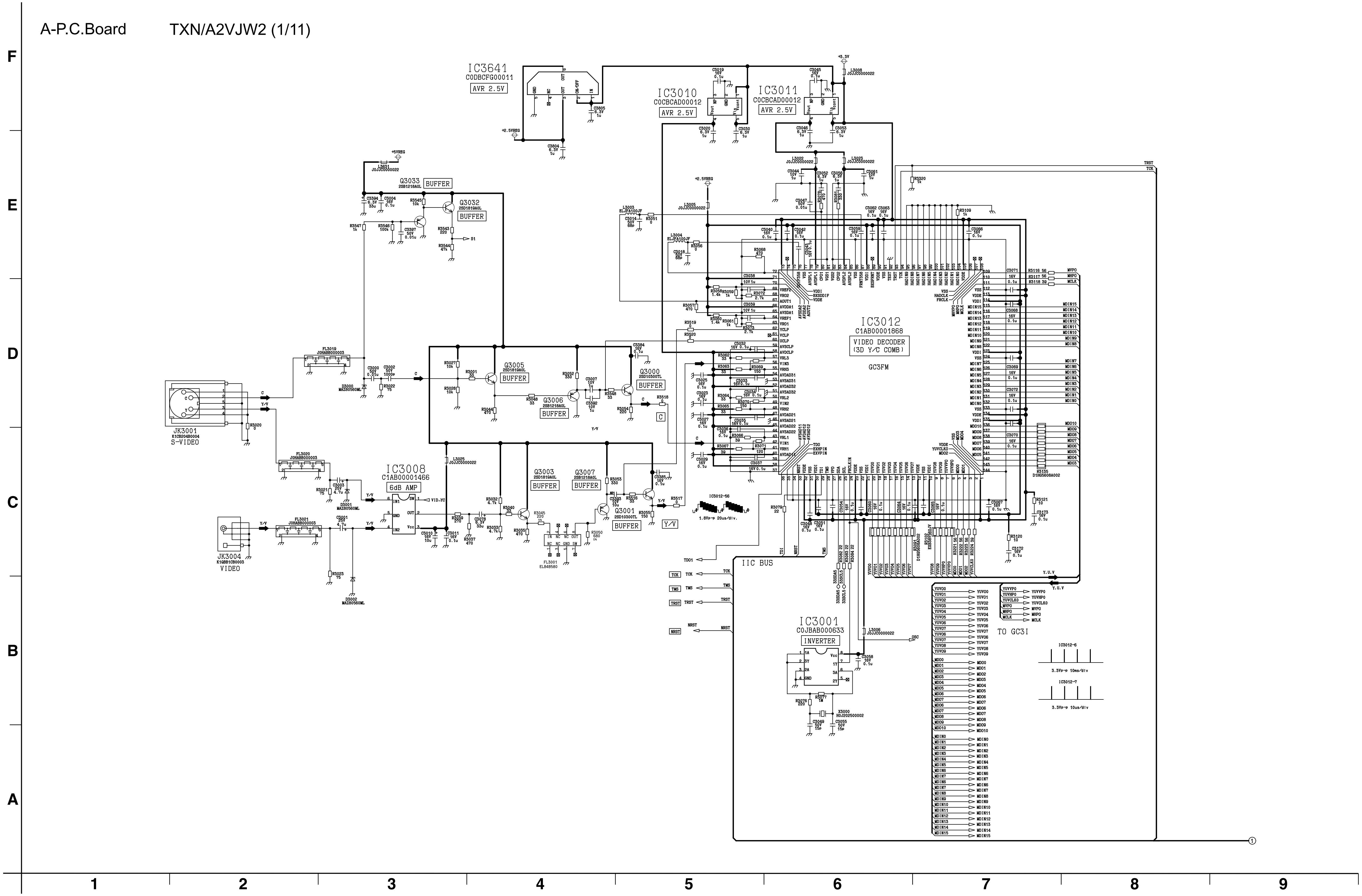
From/To		To/From	Color code
Block diagram	↔	Schematic diagram	Magenta
Schematic diagram	↔	Schematic diagram	Green
Schematic diagram	↔	Circuit boards	Yellow
Schematic diagram	↔	Waveforms	Cyan (Light blue)

7. **HOT and COLD indications**
   The power circuit board contains a circuit area using a separate power supply to isolate the ground connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the precautions below:
8. **This schematic diagram is the latest at the time of printing and the subject to change without notice.**

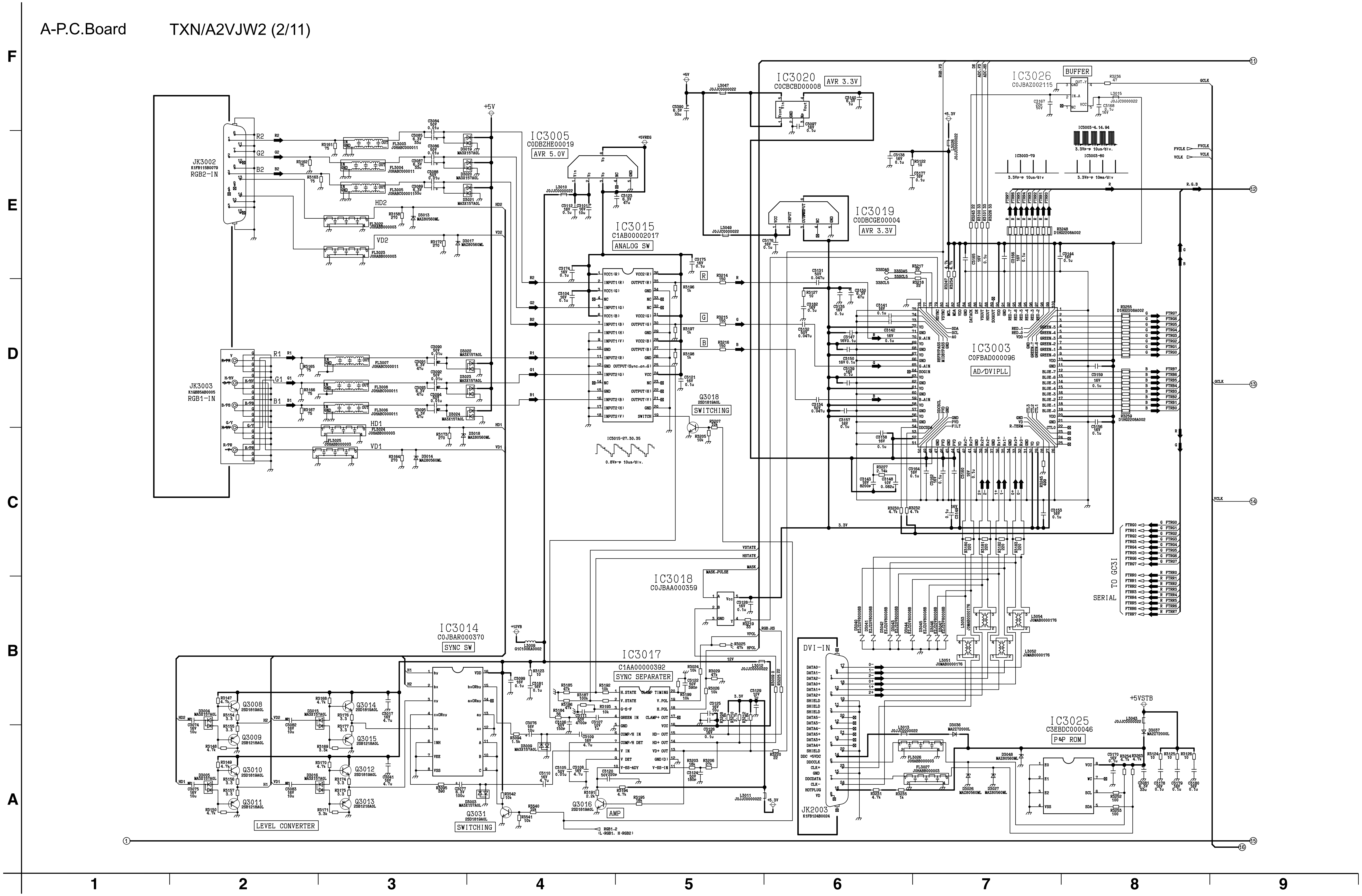
Precautions:

1. NEVER touch the HOT part or the HOT and COLD parts at the same time, or you may get an electric shock.
2. NEVER short-circuit the HOT and COLD circuits, or the fuse may blow and the parts may break.
3. NEVER connect an instrument such oscilloscope to the HOT and COLD circuit simultaneously, or the fuse may blow.Connect the ground of instruments to the ground of the circuit being measured.
4. MAKE SURE to unplug the power cord from the power outlet before removing the chassis.

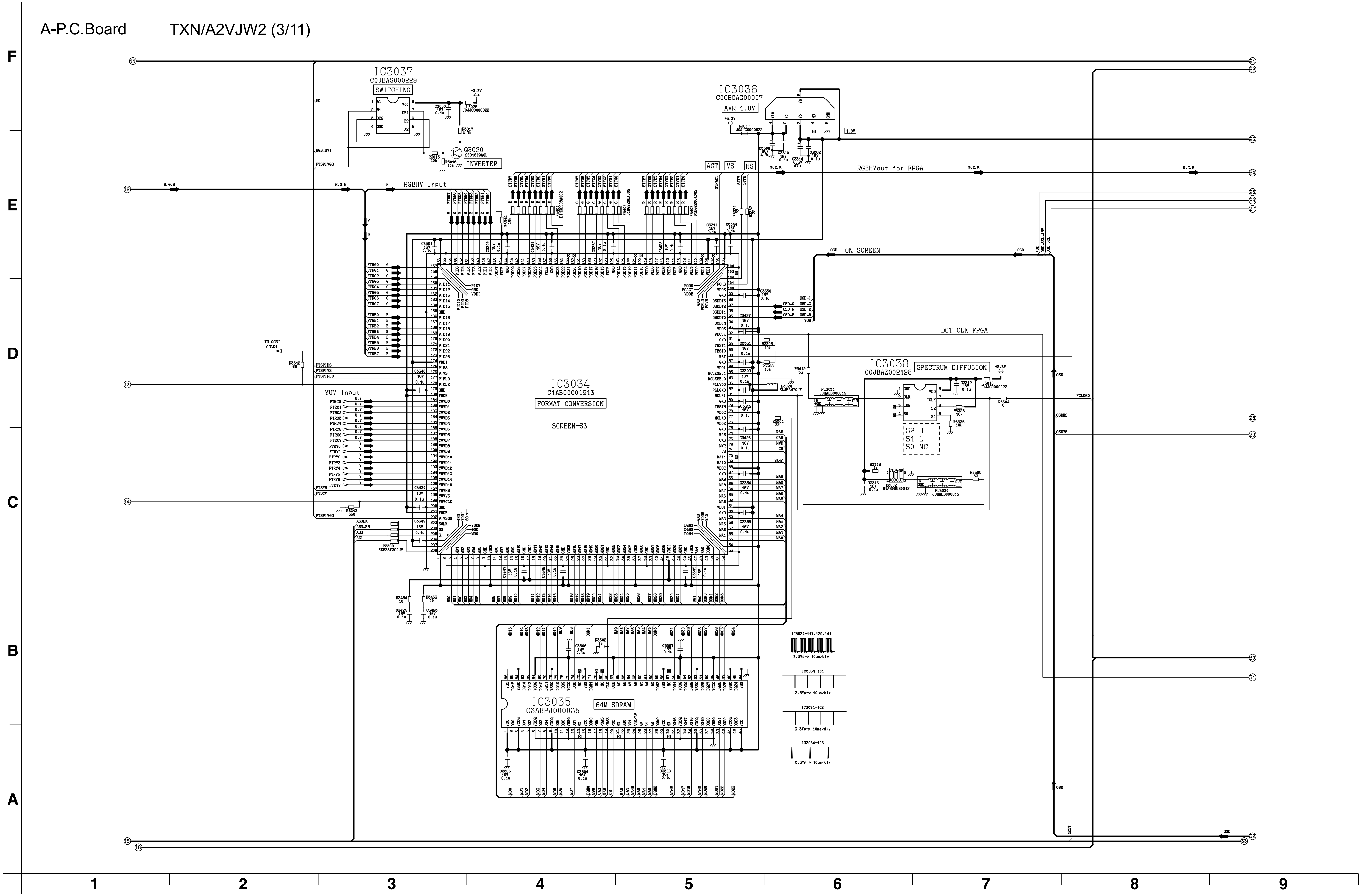
15.1. A-P.C.Board (1/11)


A-P.C.Board
TXN/A2VJW2 (1/11)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC3641
C0DBCFG00011
AVR 2.5V
IC3010
C0CBCAD00012
AVR 2.5V
IC3011
C0CBCAD00012
AVR 2.5V
IC3012
C1AB00001868
VIDEO DECODER
(3D Y/C COMB)
GC3FM
IC3008
C1AB00001466
6dB AMP
IC3001
C0JBAB000633
INVERTER
Q3033
2SB1218A0L
BUFFER
Q3032
2SD1819A0L
BUFFER
Q3005
2SD1819A0L
BUFFER
Q3006
2SB1218A0L
BUFFER
Q3000
2SD1030OTL
BUFFER
Q3003
2SD1819A0L
BUFFER
Q3007
2SB1218A0L
BUFFER
Q3001
2SD1030OTL
BUFFER
JK3001
K1CB204B0004
S-VIDEO
JK3004
K1QBB1CB0003
VIDEO
FL3019
FL3020
FL3021
FL3001
X3000
+5VREG
+2.5VREG
+3.3V
IIC BUS
TDO
TCK
TMS
TRST
NRST
OSC
TO GC3I
IC3012-56
1.8Vp-p 20us/div.
IC3012-6
3.3Vp-p 10ms/div
IC3012-7
3.3Vp-p 10us/div
Y.U.V
TRST
TCK
①

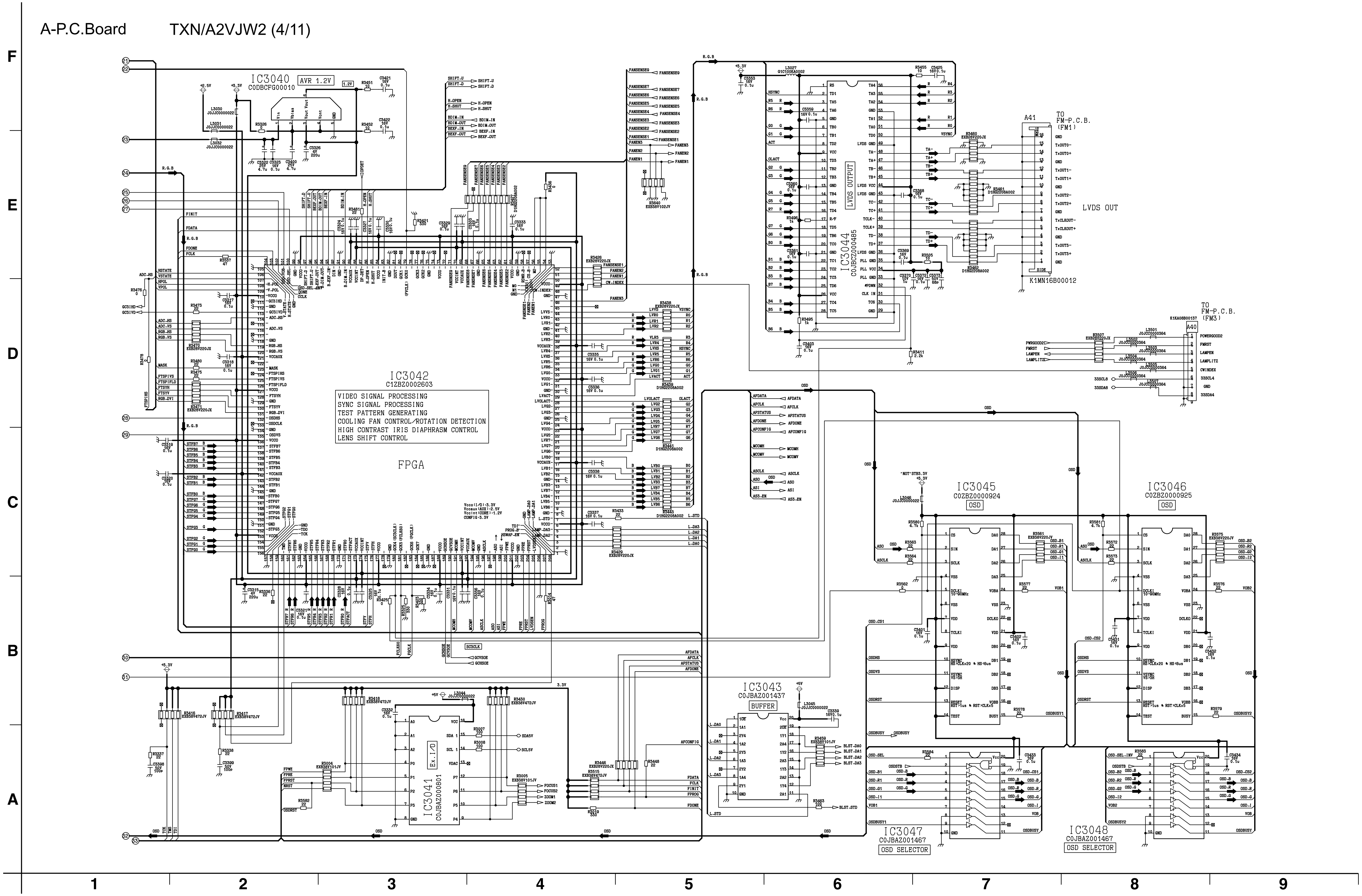
15.2. A-P.C.Board (2/11)


A-P.C.Board
TXN/A2VJW2 (2/11)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
JK3002
RGB2-IN
JK3003
RGB1-IN
IC3005
C0DBZHE00019
AVR 5.0V
IC3015
C1AB00002017
ANALOG SW
IC3020
C0CBCBD00008
AVR 3.3V
IC3026
C0JBAZ002115
BUFFER
IC3019
C0DBCGE00004
AVR 3.3V
IC3003
C0FBAD000096
AD/DVIPLL
Q3018
SWITCHING
IC3018
C0JBAA000359
IC3014
C0JBAR000370
SYNC SW
IC3017
C1AA00000392
SYNC SEPARATER
Q3016
AMP
Q3031
SWITCHING
Q3008
Q3009
Q3010
Q3011
Q3012
Q3013
Q3014
Q3015
LEVEL CONVERTER
DVI-IN
JK2003
IC3025
C3EBDC000046
P&P ROM
TO GC31
SERIAL
+5V
+5VSTB
R2
G2
B2
R1
G1
B1
HD2
VD2
HD1
VD1
3.3V
GCLK
VCLK
FVCLK
R.G.B
VSTATE
HSTATE
MASK
RGB1-2 (L-RGB1, H-RGB2)
①
⑪
⑫
⑬
⑭
⑮
⑯

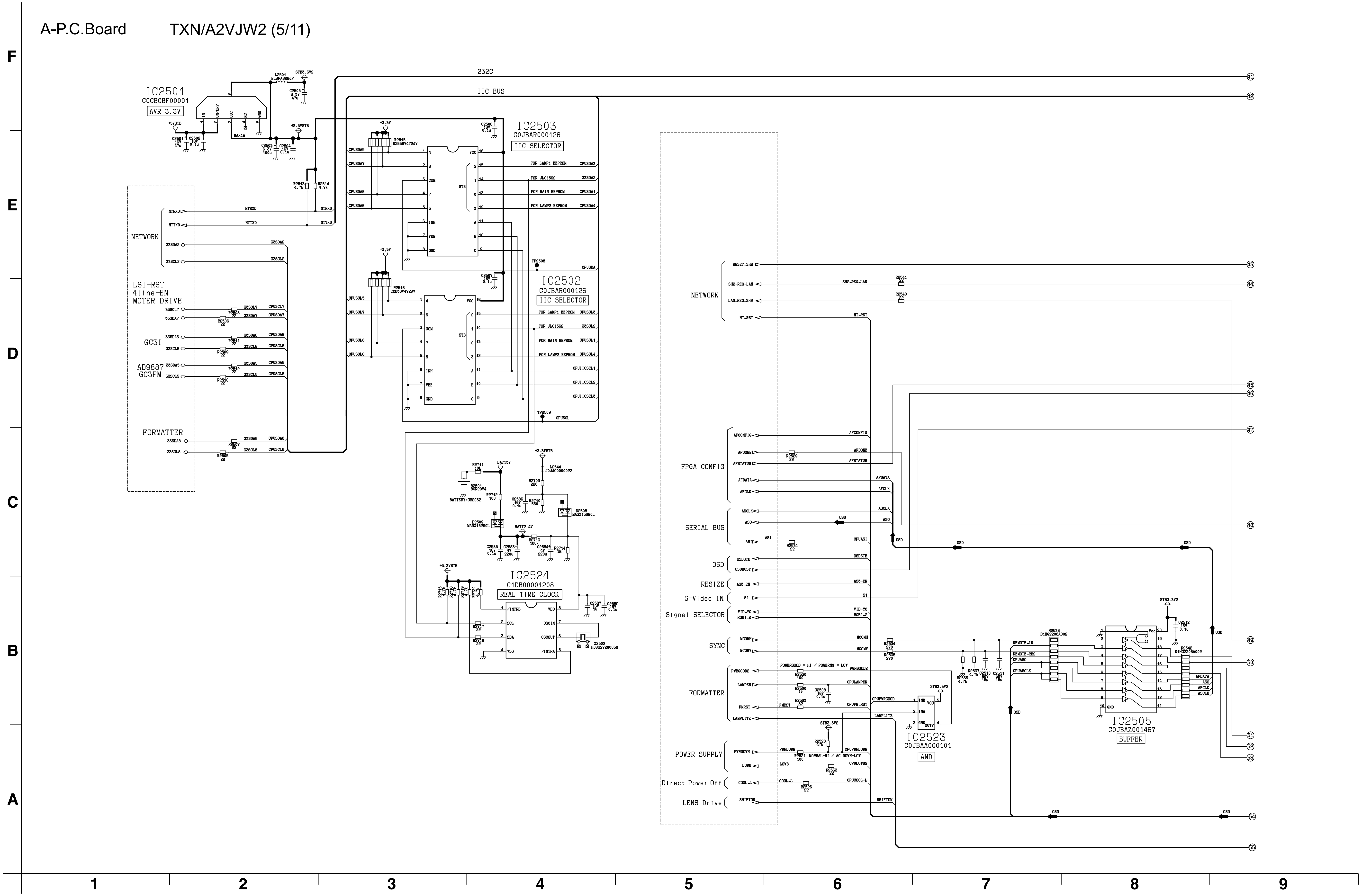
15.3. A-P.C.Board (3/11)


A-P.C.Board
TXN/A2VJW2 (3/11)
IC3037
C0JBAS000229
SWITCHING
Q3020
2SD1819A0L
INVERTER
IC3036
C0CBCAG00007
AVR 1.8V
ACT
VS
HS
RGBHVout for FPGA
RGBHV Input
ON SCREEN
DOT CLK FPGA
IC3034
C1AB00001913
FORMAT CONVERSION
SCREEN-S3
YUV Input
IC3038
C0JBAZ002128
SPECTRUM DIFFUSION
S2 H
S1 L
S0 NC
IC3035
C3ABPJ000035
64M SDRAM
IC3034-117,129,141
3.3Vp-p 10us/div.
IC3034-101
3.3Vp-p 10us/div
IC3034-102
3.3Vp-p 10ms/div
IC3034-106
3.3Vp-p 10us/div
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

15.4. A-P.C.Board (4/11)

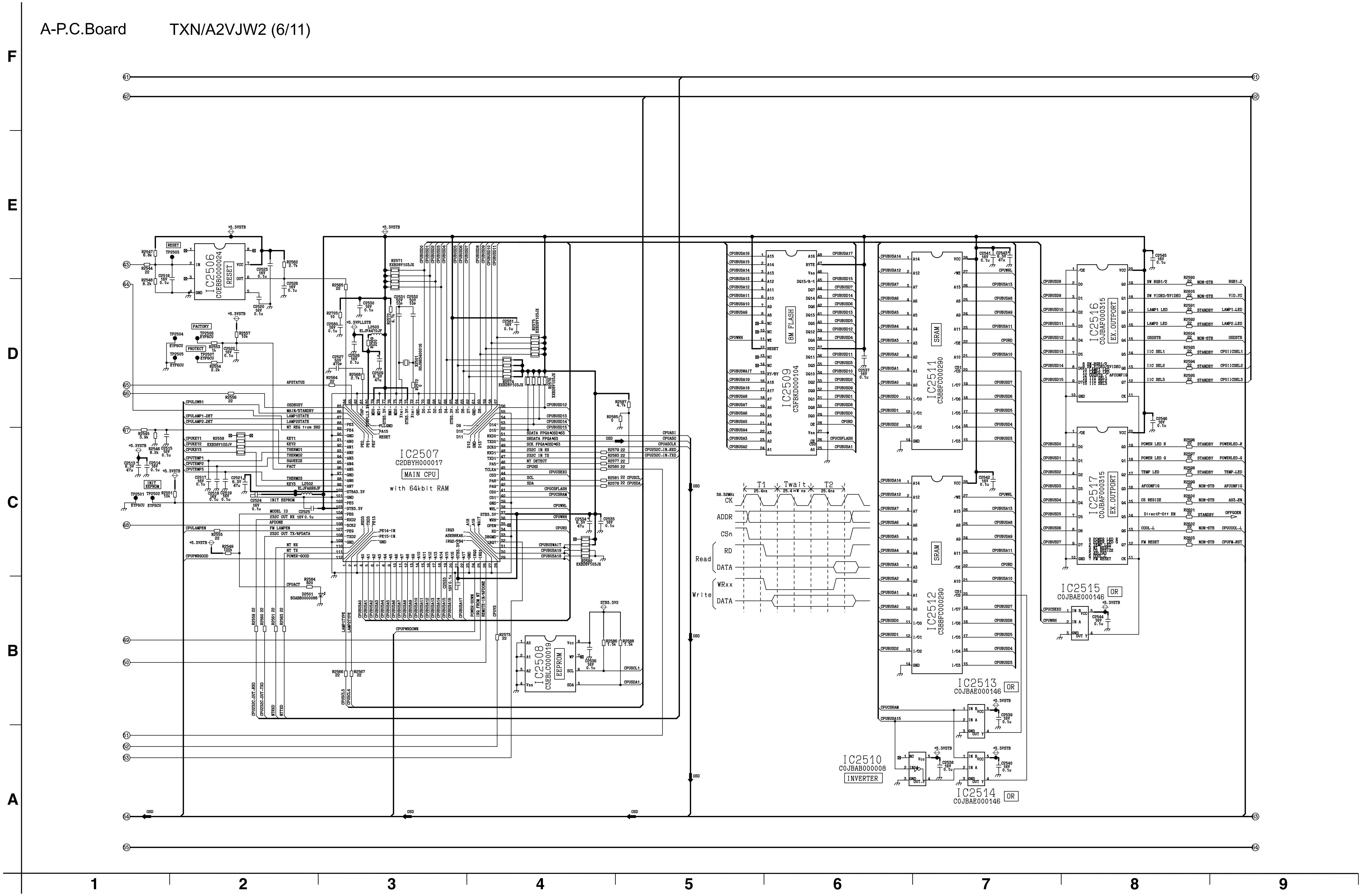

A-P.C.Board
TXN/A2VJW2 (4/11)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC3040
C0DBCFG00010
AVR 1.2V
IC3042
C1ZBZ0002603
VIDEO SIGNAL PROCESSING
SYNC SIGNAL PROCESSING
TEST PATTERN GENERATING
COOLING FAN CONTROL/ROTATION DETECTION
HIGH CONTRAST IRIS DIAPHRASM CONTROL
LENS SHIFT CONTROL
FPGA
IC3044
C0JBCZ000485
LVDS OUTPUT
A41
TO FM-P.C.B. (FM1)
LVDS OUT
K1MN16B00012
TO FM-P.C.B. (FM3)
A40
IC3045
C0ZBZ0000924
OSD
IC3046
C0ZBZ0000925
OSD
IC3041
C0JBAZ000801
Ex.I/O
IC3043
C0JBAZ001437
BUFFER
IC3047
C0JBAZ001467
OSD SELECTOR
IC3048
C0JBAZ001467
OSD SELECTOR

15.5. A-P.C.Board (5/11)

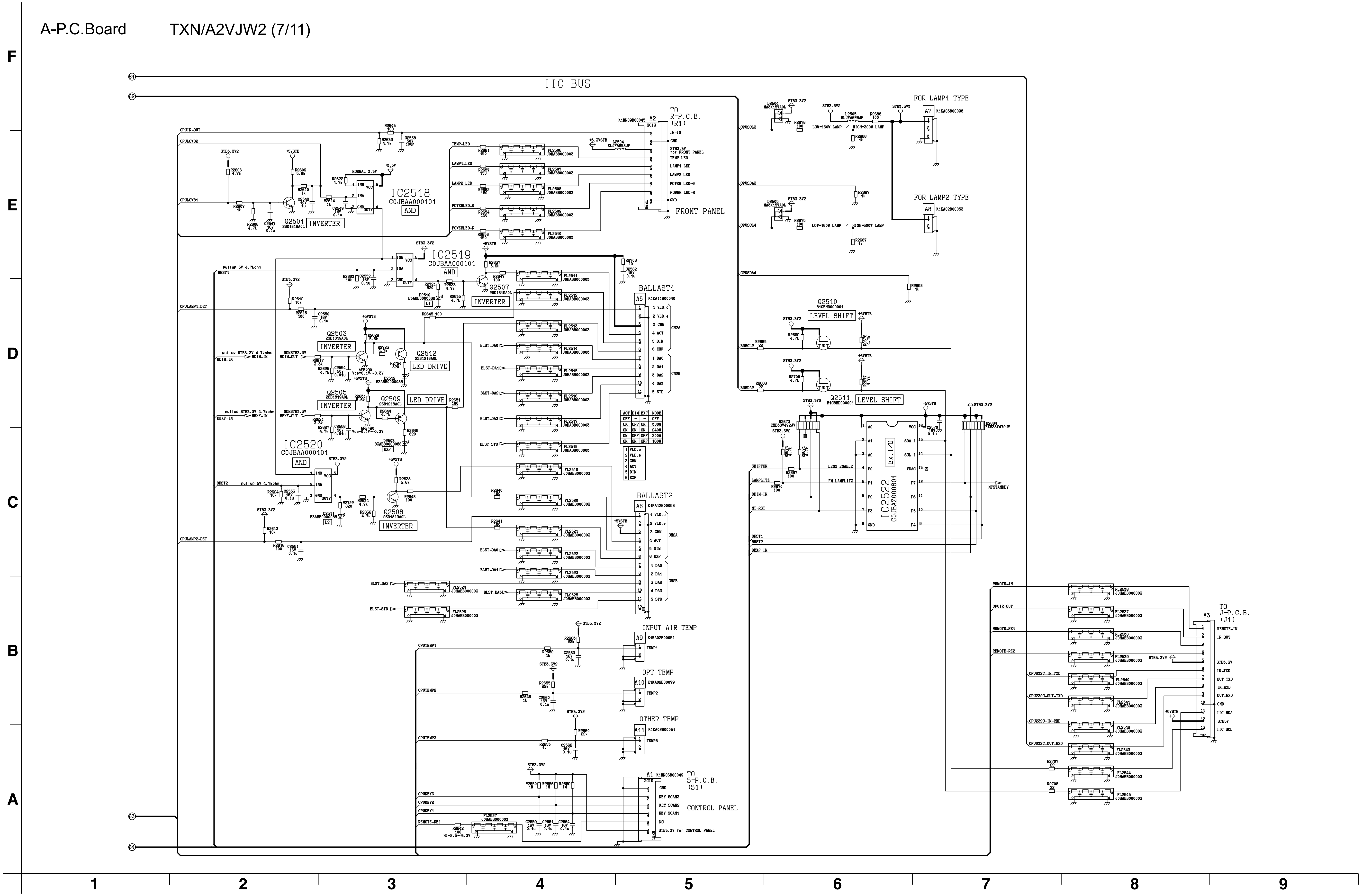

A-P.C.Board
TXN/A2VJW2 (5/11)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC2501
C0CBCBF00001
AVR 3.3V
IC2503
C0JBAR000126
IIC SELECTOR
IC2502
C0JBAR000126
IIC SELECTOR
IC2524
C1DB00001208
REAL TIME CLOCK
IC2523
C0JBAA000101
AND
IC2505
C0JBAZ001467
BUFFER
232C
IIC BUS
NETWORK
LSI-RST
4line-EN
MOTER DRIVE
GC3I
AD9887
GC3FM
FORMATTER
FPGA CONFIG
SERIAL BUS
OSD
RESIZE
S-Video IN
Signal SELECTOR
SYNC
POWER SUPPLY
Direct Power Off
LENS Drive
BATTERY-CR2032
FOR LAMP1 EEPROM
FOR JLC1562
FOR MAIN EEPROM
FOR LAMP2 EEPROM
POWERGOOD = HI / POWERNG = LOW
NORMAL=HI / AC DOWN=LOW
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55

15.6. A-P.C.Board (6/11)

A-P.C.Board TXN/A2VJW2 (6/11)

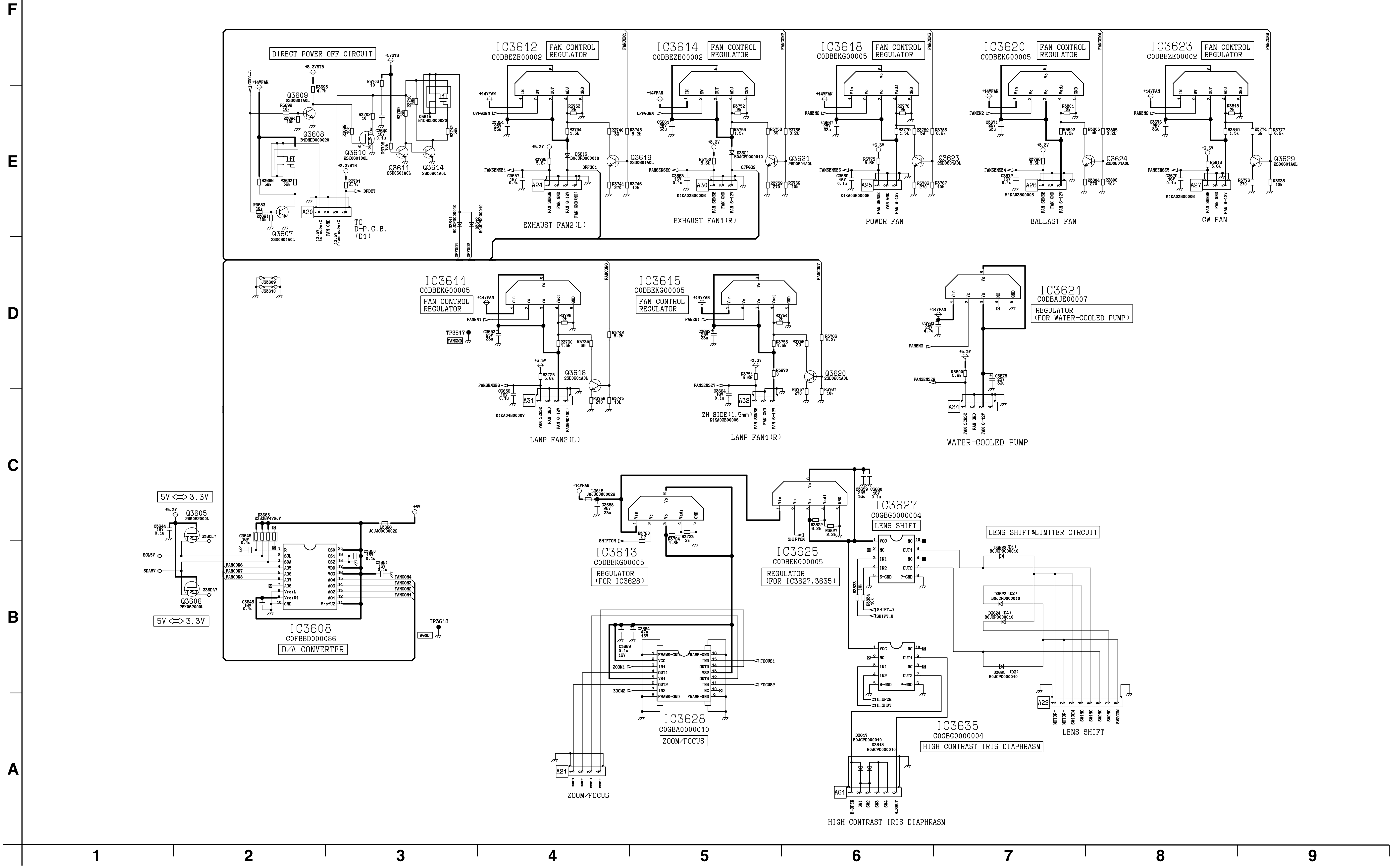

F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC2506
C0EBB0000024
RESET
IC2507
C2DBYH000017
MAIN CPU
with 64kbit RAM
IC2508
C3EBLC000019
EEPROM
IC2509
C3FBKD000104
8M FLASH
IC2511
C3BBFC000290
SRAM
IC2512
C3BBFC000290
SRAM
IC2513
C0JBAE000146
OR
IC2514
C0JBAE000146
OR
IC2515
C0JBAE000146
OR
IC2510
C0JBAB000008
INVERTER
IC2516
C0JBAF000315
EX.OUTPORT
IC2517
C0JBAF000315
EX.OUTPORT
39.32MHz
CK
ADDR
CSn
Read
RD
DATA
Write
WRxx
DATA
T1
Twait
T2
25.4ns
+3.3VSTB
STB3.3V2
OSD
FACTORY
PROTECT
INIT EEPROM
AFSTATUS
CPUUNWR
CPUWRH
CPUSCL1
CPUSDA1
POWER-GOOD
SW RGB1/2
SW VIDEO/SVIDEO
LAMP1 LED
LAMP2 LED
OSDSTB
IIC SEL1
IIC SEL2
IIC SEL3
POWER LED R
POWER LED G
TEMP LED
AFCONFIG
CS RESIZE
DirectP-Off EN
COOL-L
FM RESET
STANDBY
NON-STB

15.7. A-P.C.Board (7/11)


A-P.C.Board
TXN/A2VJW2 (7/11)
IIC BUS
IC2518
C0JBAA000101
AND
IC2519
C0JBAA000101
AND
IC2520
C0JBAA000101
AND
Q2501
INVERTER
Q2503
INVERTER
Q2505
INVERTER
Q2507
INVERTER
Q2508
INVERTER
Q2509
LED DRIVE
Q2512
LED DRIVE
Q2510
LEVEL SHIFT
Q2511
LEVEL SHIFT
IC2522
C0JBA2000801
TO R-P.C.B. (R1)
A2
FRONT PANEL
IR-IN
GND
STB3.3V for FRONT PANEL
TEMP LED
LAMP1 LED
LAMP2 LED
POWER LED-G
POWER LED-R
GND
FOR LAMP1 TYPE
A7
FOR LAMP2 TYPE
A8
LOW=160W LAMP / HIGH=300W LAMP
BALLAST1
A5
K1KA11B00040
BALLAST2
A6
K1KA12B00098
1 VLD.c
2 VLD.e
3 CMN
4 ACT
5 DIM
6 EXF
CN2A
1 DA0
2 DA1
3 DA2
4 DA3
5 STD
CN2B
ACT | DIM | EXF | MODE
OFF | - | - | OFF
ON | OFF | ON | 300W
ON | ON | ON | 240W
ON | OFF | OFF | 200W
ON | ON | OFF | 160W
INPUT AIR TEMP
A9
TEMP1
OPT TEMP
A10
TEMP2
OTHER TEMP
A11
TEMP3
TO S-P.C.B. (S1)
A1
CONTROL PANEL
GND
KEY SCAN3
KEY SCAN2
KEY SCAN1
NC
STB3.3V for CONTROL PANEL
TO J-P.C.B. (J1)
A3
REMOTE-IN
IR-OUT
STB3.3V
IN-TXD
OUT-TXD
IN-RXD
OUT-RXD
GND
IIC SDA
STB5V
IIC SCL
NTSTANDBY
LENS ENABLE
FW LAMPLITZ
SHIFTON
LAMPLITZ
BDIM-IN
NT-RST
BRST1
BRST2
BEXF-IN
CPUIR-OUT
CPULOWB2
CPULOWB1
CPULAMP1-DET
CPULAMP2-DET
CPUTEMP1
CPUTEMP2
CPUTEMP3
CPUKEY3
CPUKEY2
CPUKEY1
REMOTE-RE1
CPUSCL3
CPUSDA3
CPUSCL4
CPUSDA4
33SCL2
33SDA2
BLST-DA0
BLST-DA1
BLST-DA2
BLST-DA3
BLST-STD
STB3.3V2
+5VSTB
61
62
63
64
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

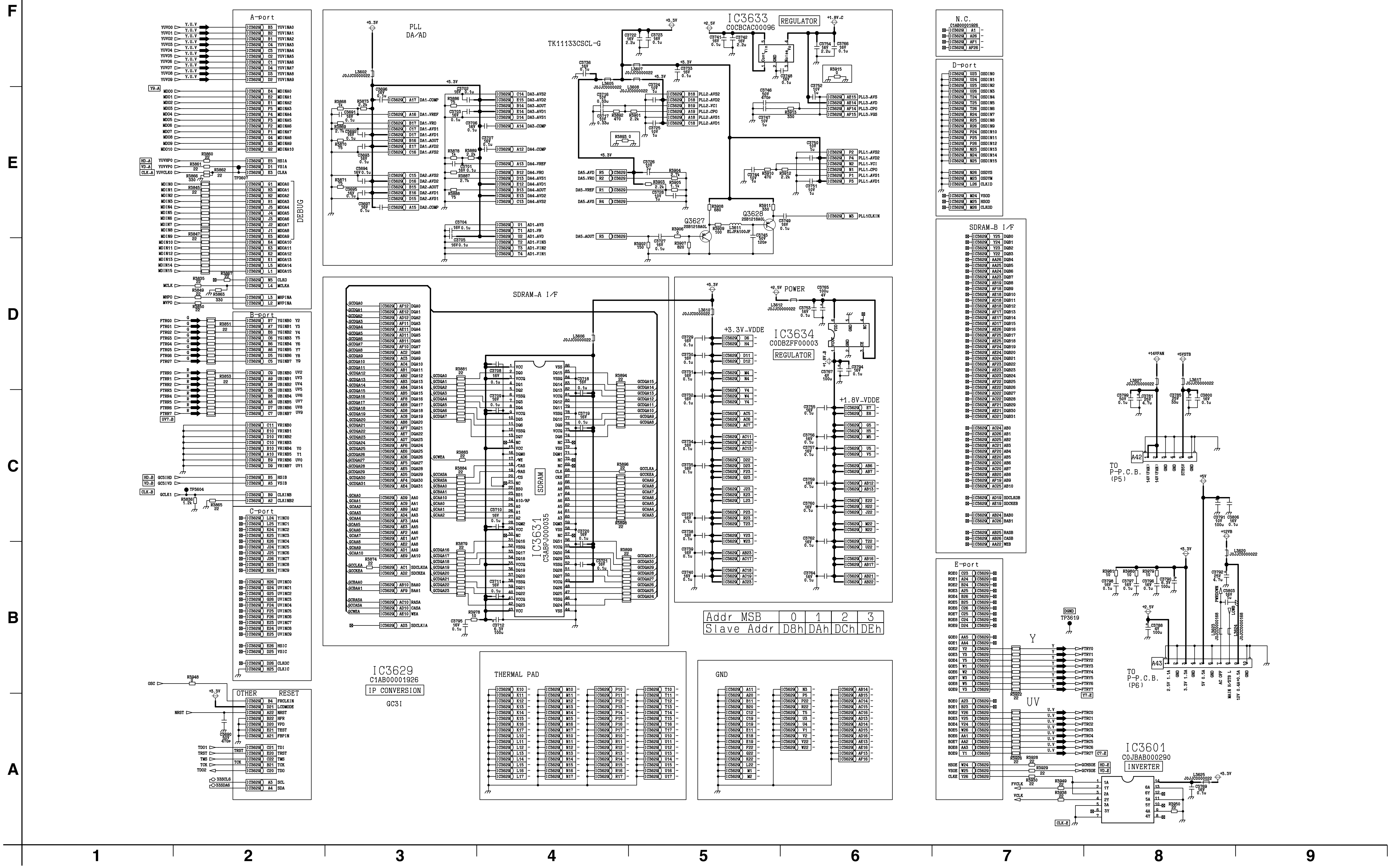
15.8. A-P.C.Board (8/11)

A-P.C.Board TXN/A2VJW2 (8/11)

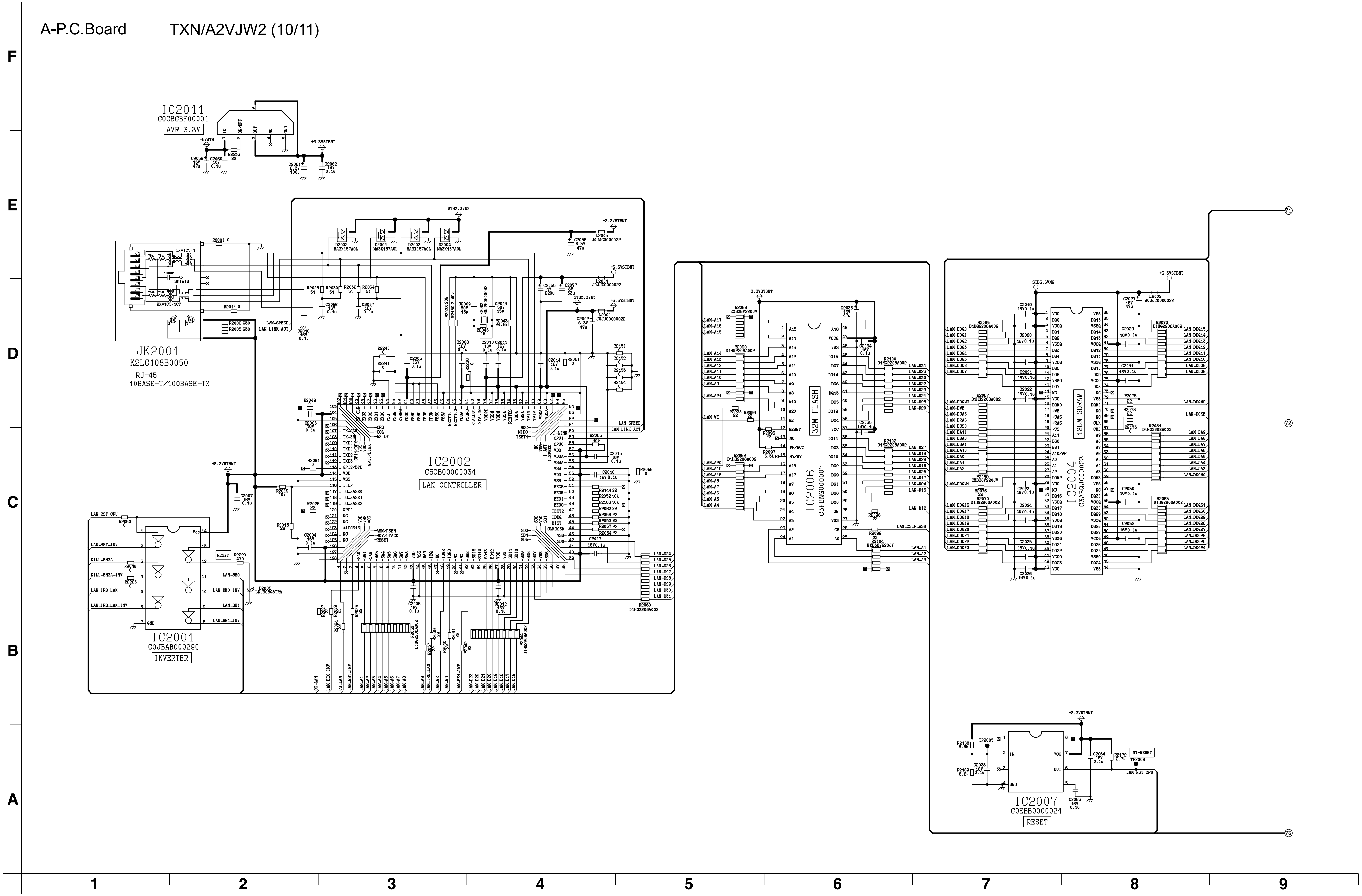

F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
DIRECT POWER OFF CIRCUIT
Q3609
Q3608
Q3610
Q3611
Q3614
Q3615
Q3607
A20
TO D-P.C.B. (D1)
IC3612 C0DBEZE00002 FAN CONTROL REGULATOR
IC3614 C0DBEZE00002 FAN CONTROL REGULATOR
IC3618 C0DBEKG00005 FAN CONTROL REGULATOR
IC3620 C0DBEKG00005 FAN CONTROL REGULATOR
IC3623 C0DBEZE00002 FAN CONTROL REGULATOR
Q3619
Q3621
Q3623
Q3624
Q3629
A24
A30
A25
A26
A27
EXHAUST FAN2(L)
EXHAUST FAN1(R)
POWER FAN
BALLAST FAN
CW FAN
IC3611 C0DBEKG00005 FAN CONTROL REGULATOR
IC3615 C0DBEKG00005 FAN CONTROL REGULATOR
Q3618
Q3620
A31
A32
LANP FAN2(L)
ZH SIDE(1.5mm)
LANP FAN1(R)
IC3621 C0DBAJE00007 REGULATOR (FOR WATER-COOLED PUMP)
A34
WATER-COOLED PUMP
5V ⇔ 3.3V
Q3605
Q3606
IC3608 C0FBBD000086 D/A CONVERTER
TP3617
TP3618
IC3613 C0DBEKG00005 REGULATOR (FOR IC3628)
IC3625 C0DBEKG00005 REGULATOR (FOR IC3627.3635)
IC3627 C0GBG0000004 LENS SHIFT
LENS SHIFT&LIMITER CIRCUIT
A22
LENS SHIFT
IC3628 C0GBA0000010 ZOOM/FOCUS
A21
ZOOM/FOCUS
IC3635 C0GBG0000004 HIGH CONTRAST IRIS DIAPHRASM
A61
HIGH CONTRAST IRIS DIAPHRASM

15.9. A-P.C.Board (9/11)

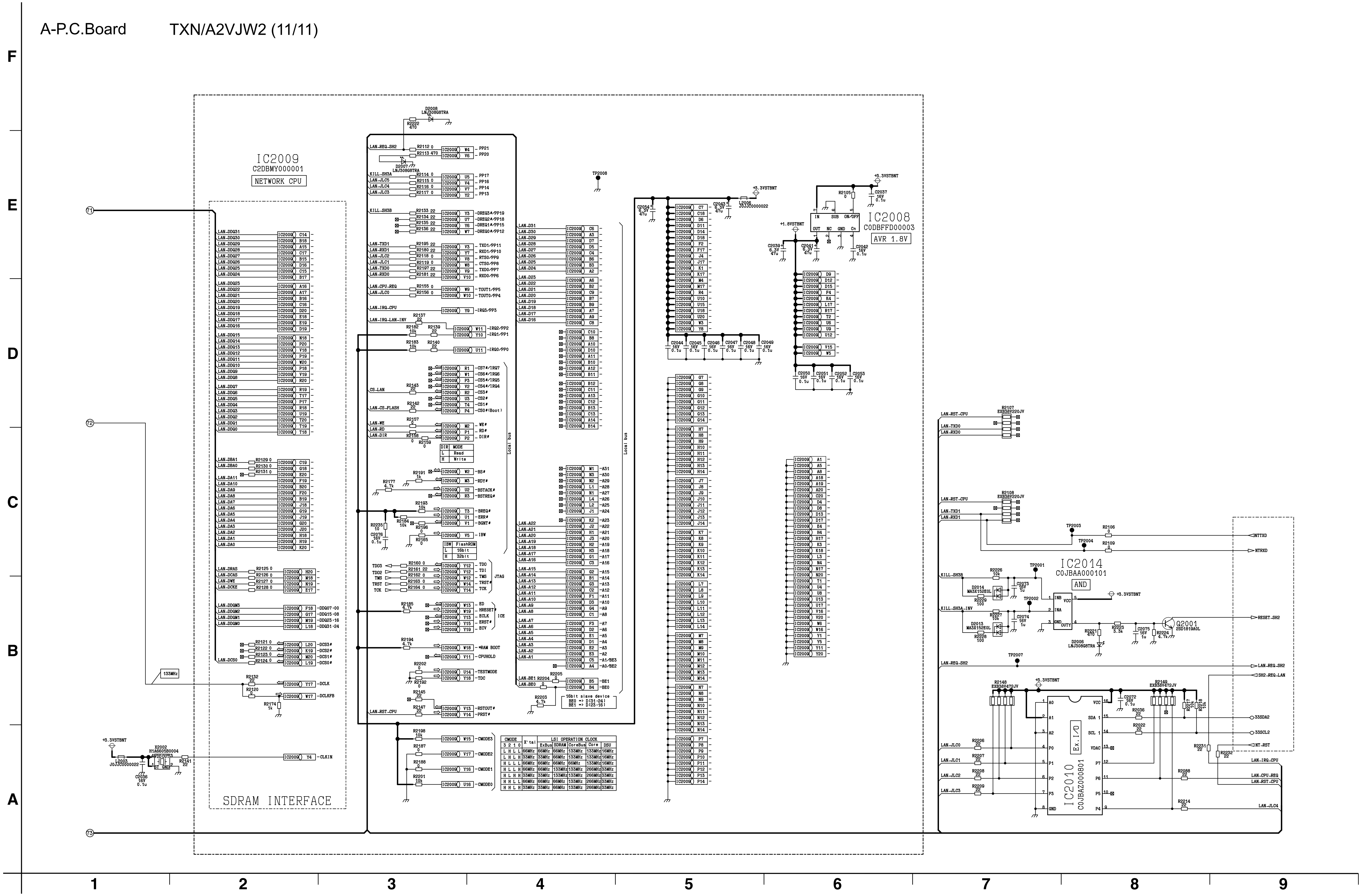
A-P.C.Board TXN/A2VJW2 (9/11)


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
A-port
B-port
C-port
DEBUG
OTHER
RESET
PLL DA/AD
TK11133CSCL-G
IC3633
C0CBCA000096
REGULATOR
N.C.
D-port
SDRAM-B I/F
SDRAM-A I/F
SDRAM
IC3631
C3ABPJ000035
POWER
+3.3V-VDDE
IC3634
C0DBZFF00003
REGULATOR
+1.8V-VDDE
E-port
Y
UV
TO P-P.C.B. (P5)
TO P-P.C.B. (P6)
A42
A43
Addr MSB
Slave Addr
0
1
2
3
D8h
DAh
DCh
DEh
IC3629
C1AB00001926
IP CONVERSION
GC3I
THERMAL PAD
GND
IC3601
C0JBAB000290
INVERTER
TP3619

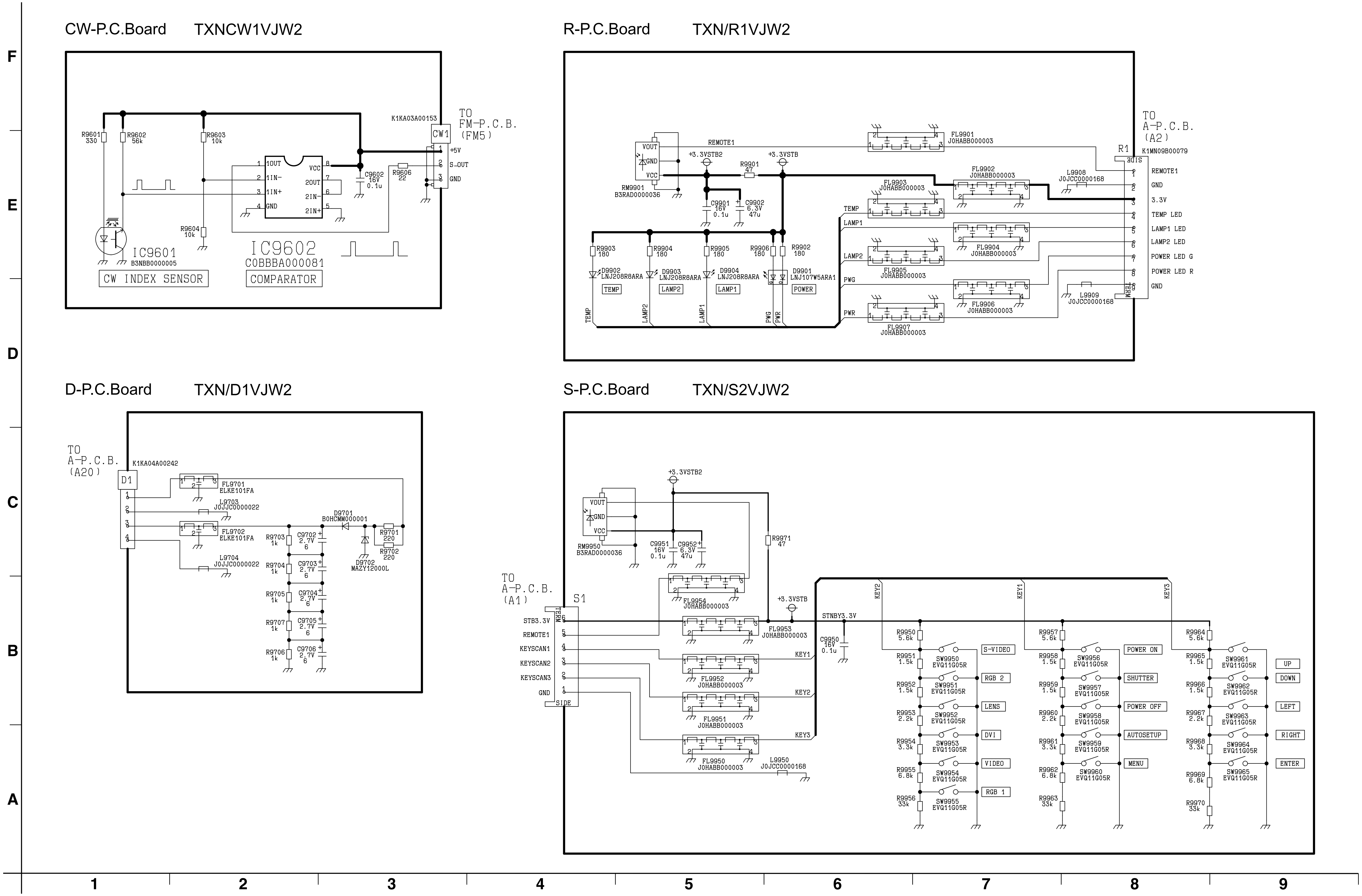
15.10. A-P.C.Board (10/11)


A-P.C.Board
TXN/A2VJW2 (10/11)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC2011
C0CBCBF00001
AVR 3.3V
+5VSTB
+3.3VSTBNT
STB3.3VN3
JK2001
K2LC108B0050
RJ-45
10BASE-T/100BASE-TX
TX=1CT:1
RX=1CT:1CT
Shield
D2002 MA3X157A0L
D2001 MA3X157A0L
D2003 MA3X157A0L
D2004 MA3X157A0L
LAN-SPEED
LAN-LINK-ACT
IC2002
C5CB00000034
LAN CONTROLLER
IC2001
C0JBAB000290
INVERTER
LAN-RST-CPU
LAN-RST-INV
KILL-SH3A
KILL-SH3A-INV
LAN-IRQ-LAN
LAN-IRQ-LAN-INV
LAN-BE0
LAN-BE0-INV
LAN-BE1
LAN-BE1-INV
RESET
D2005 LNJ308G8TRA
IC2006
C3FBNG000007
32M FLASH
LAN-WE
LAN-DIR
LAN-CS-FLASH
IC2004
C3ABQJ000023
128M SDRAM
STB3.3VN2
LAN-DQM2
LAN-DCKE
IC2007
C0EBB0000024
RESET
TP2005
TP2006
NT-RESET
LAN-RST-CPU
71
72
73

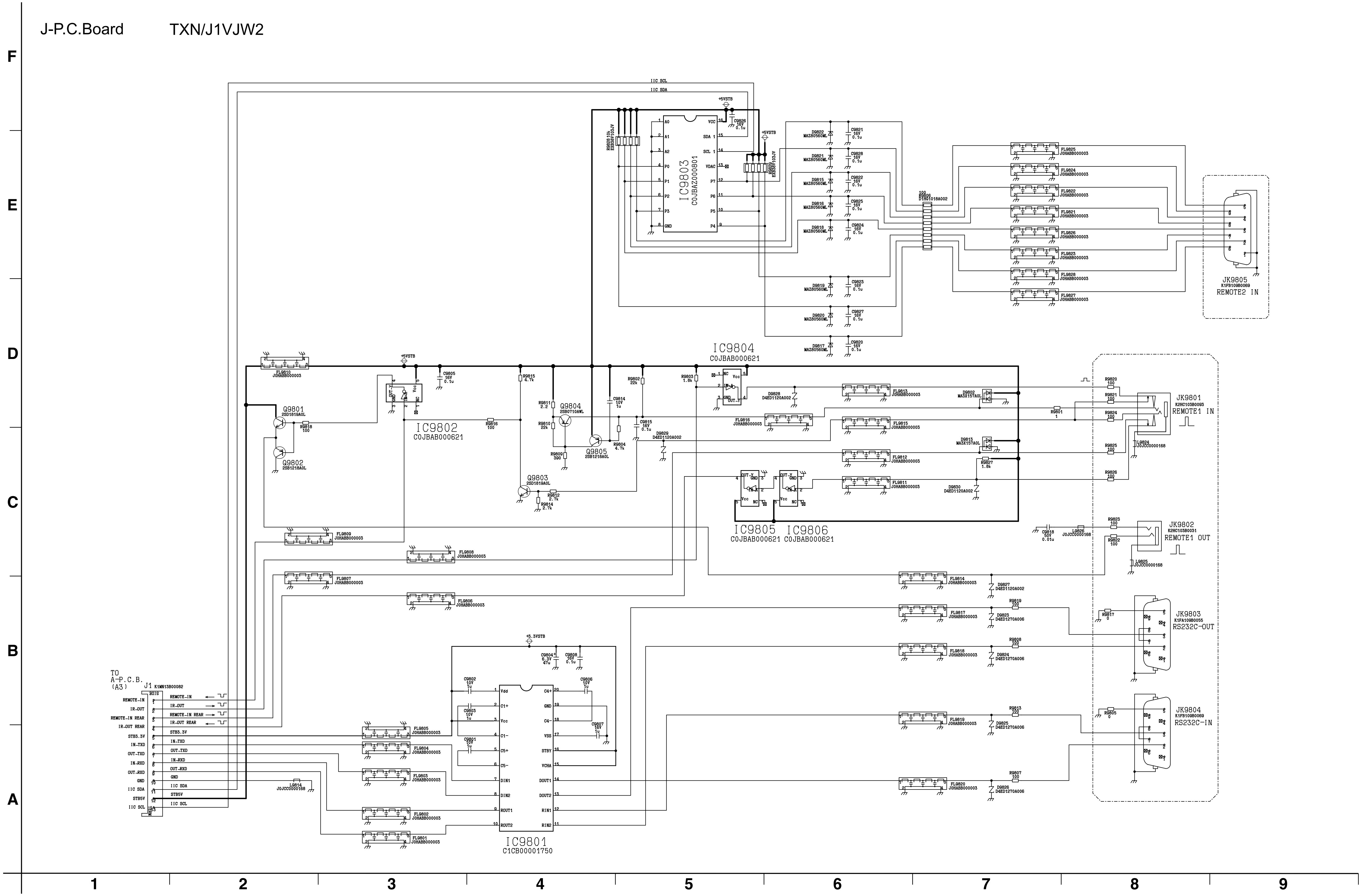
15.11. A-P.C.Board (11/11)


A-P.C.Board
TXN/A2VJW2 (11/11)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC2009
C2DBMY000001
NETWORK CPU
SDRAM INTERFACE
IC2008
C0DBFFD00003
AVR 1.8V
IC2014
C0JBAA000101
AND
IC2010
C0JBAZ000801
Ex.I/O
Q2001
2SD1819A0L
X2002
H1A6605B0004
133MHz
Local bus
JTAG
ICE
16bit slave device
BE0 => D31-24
BE1 => D23-16
LS1 OPERATION CLOCK
CMODE
+3.3VSTBNT
+1.8VSTBNT
LAN-REQ-SH2
LAN-RST-CPU
LAN-IRQ-CPU
LAN-CPU-REQ
LAN-JLC4
NTTXD
NTRXD
RESET-SH2
SH2-REQ-LAN
33SDA2
33SCL2
NT-RST
CLKIN
DCLK
DCLKFB

15.12. CW/D/R/S-P.C.Board

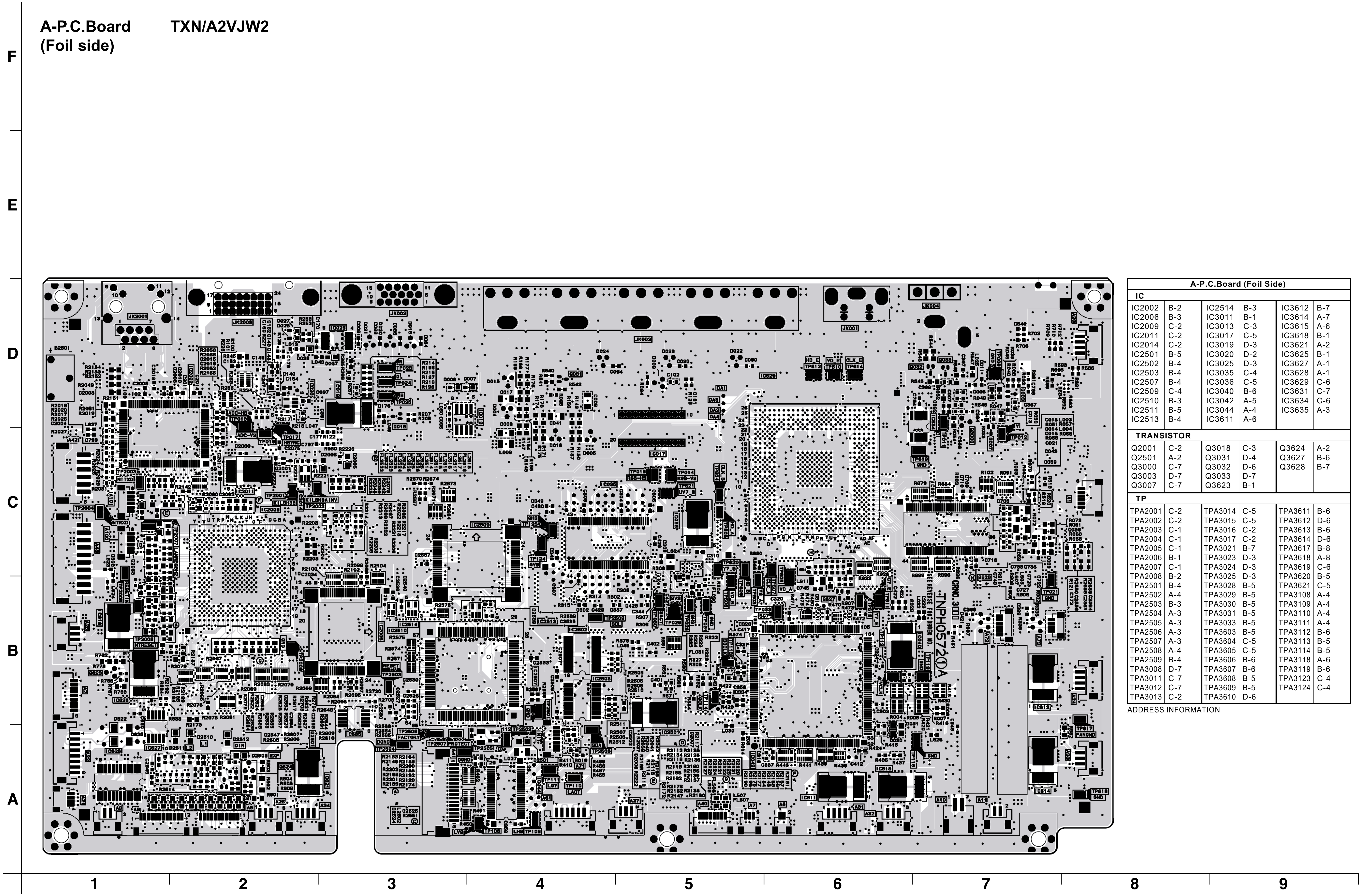

CW-P.C.Board TXNCW1VJW2
R-P.C.Board TXN/R1VJW2
D-P.C.Board TXN/D1VJW2
S-P.C.Board TXN/S2VJW2
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
R9601 330
R9602 56k
R9603 10k
R9604 10k
IC9601 B3NBB0000005
CW INDEX SENSOR
IC9602 C0BBBA000081
COMPARATOR
1OUT
1IN-
1IN+
GND
VCC
2OUT
2IN-
2IN+
C9602 16V 0.1u
R9606 22
K1KA03A00153
CW1
+5V
S_OUT
GND
TO FM-P.C.B. (FM5)
RM9901 B3RAD0000036
VOUT
GND
VCC
REMOTE1
+3.3VSTB2
+3.3VSTB
R9901 47
C9901 16V 0.1u
C9902 6.3V 47u
R9903 180
R9904 180
R9905 180
R9906 180
R9902 180
D9902 LNJ208R8ARA
D9903 LNJ208R8ARA
D9904 LNJ208R8ARA
D9901 LNJ107W5ARA1
TEMP
LAMP2
LAMP1
POWER
PWG
PWR
FL9901 J0HABB000003
FL9902 J0HABB000003
FL9903 J0HABB000003
FL9904 J0HABB000003
FL9905 J0HABB000003
FL9906 J0HABB000003
FL9907 J0HABB000003
L9908 J0JCC0000168
L9909 J0JCC0000168
R1 K1MN09B00079
TO A-P.C.B. (A2)
REMOTE1
GND
3.3V
TEMP LED
LAMP1 LED
LAMP2 LED
POWER LED G
POWER LED R
GND
TO A-P.C.B. (A20)
K1KA04A00242
D1
FL9701 ELKE101FA
L9703 J0JJC0000022
FL9702 ELKE101FA
L9704 J0JJC0000022
D9701 B0HCMM000001
D9702 MAZY12000L
R9701 220
R9702 220
R9703 1k
R9704 1k
R9705 1k
R9707 1k
R9706 1k
C9702 2.7V 6
C9703 2.7V 6
C9704 2.7V 6
C9705 2.7V 6
C9706 2.7V 6
TO A-P.C.B. (A1)
S1
STB3.3V
REMOTE1
KEYSCAN1
KEYSCAN2
KEYSCAN3
GND
SIDE
TERM
RM9950 B3RAD0000036
C9951 16V 0.1u
C9952 6.3V 47u
R9971 47
FL9954 J0HABB000003
FL9953 J0HABB000003
FL9952 J0HABB000003
FL9951 J0HABB000003
FL9950 J0HABB000003
L9950 J0JCC0000168
C9950 16V 0.1u
STNBY3.3V
KEY1
KEY2
KEY3
R9950 5.6k
R9951 1.5k
R9952 1.5k
R9953 2.2k
R9954 3.3k
R9955 6.8k
R9956 33k
SW9950 EVQ11G05R
SW9951 EVQ11G05R
SW9952 EVQ11G05R
SW9953 EVQ11G05R
SW9954 EVQ11G05R
SW9955 EVQ11G05R
S-VIDEO
RGB 2
LENS
DVI
VIDEO
RGB 1
R9957 5.6k
R9958 1.5k
R9959 1.5k
R9960 2.2k
R9961 3.3k
R9962 6.8k
R9963 33k
SW9956 EVQ11G05R
SW9957 EVQ11G05R
SW9958 EVQ11G05R
SW9959 EVQ11G05R
SW9960 EVQ11G05R
POWER ON
SHUTTER
POWER OFF
AUTOSETUP
MENU
R9964 5.6k
R9965 1.5k
R9966 1.5k
R9967 2.2k
R9968 3.3k
R9969 6.8k
R9970 33k
SW9961 EVQ11G05R
SW9962 EVQ11G05R
SW9963 EVQ11G05R
SW9964 EVQ11G05R
SW9965 EVQ11G05R
UP
DOWN
LEFT
RIGHT
ENTER

15.13. J-P.C.Board


J-P.C.Board
TXN/J1VJW2
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
IIC SCL
IIC SDA
+5VSTB
IC9803
C0JBAZ000801
IC9804
C0JBAB000621
IC9802
C0JBAB000621
IC9805
IC9806
C0JBAB000621
IC9801
C1CB00001750
+3.3VSTB
Q9801
2SD1819A0L
Q9802
2SB1218A0L
Q9803
2SD1819A0L
Q9804
2SB0710AWL
Q9805
2SB1218A0L
JK9801
K2HC103B0093
REMOTE1 IN
JK9802
K2HC103B0031
REMOTE1 OUT
JK9803
K1FA109B0055
RS232C-OUT
JK9804
K1FB109B0069
RS232C-IN
JK9805
K1FB109B0069
REMOTE2 IN
TO
A-P.C.B.
(A3)
J1 K1MN13B00082
REMOTE-IN
IR-OUT
REMOTE-IN REAR
IR-OUT REAR
STB3.3V
IN-TXD
OUT-TXD
IN-RXD
OUT-RXD
GND
IIC SDA
STB5V
IIC SCL
VDD
C1+
VCC
C1-
C5+
C5-
DIN1
DIN2
ROUT1
ROUT2
C4+
GND
C4-
VSS
STBY
VCHA
DOUT1
DOUT2
RIN1
RIN2

16 Circuit Boards

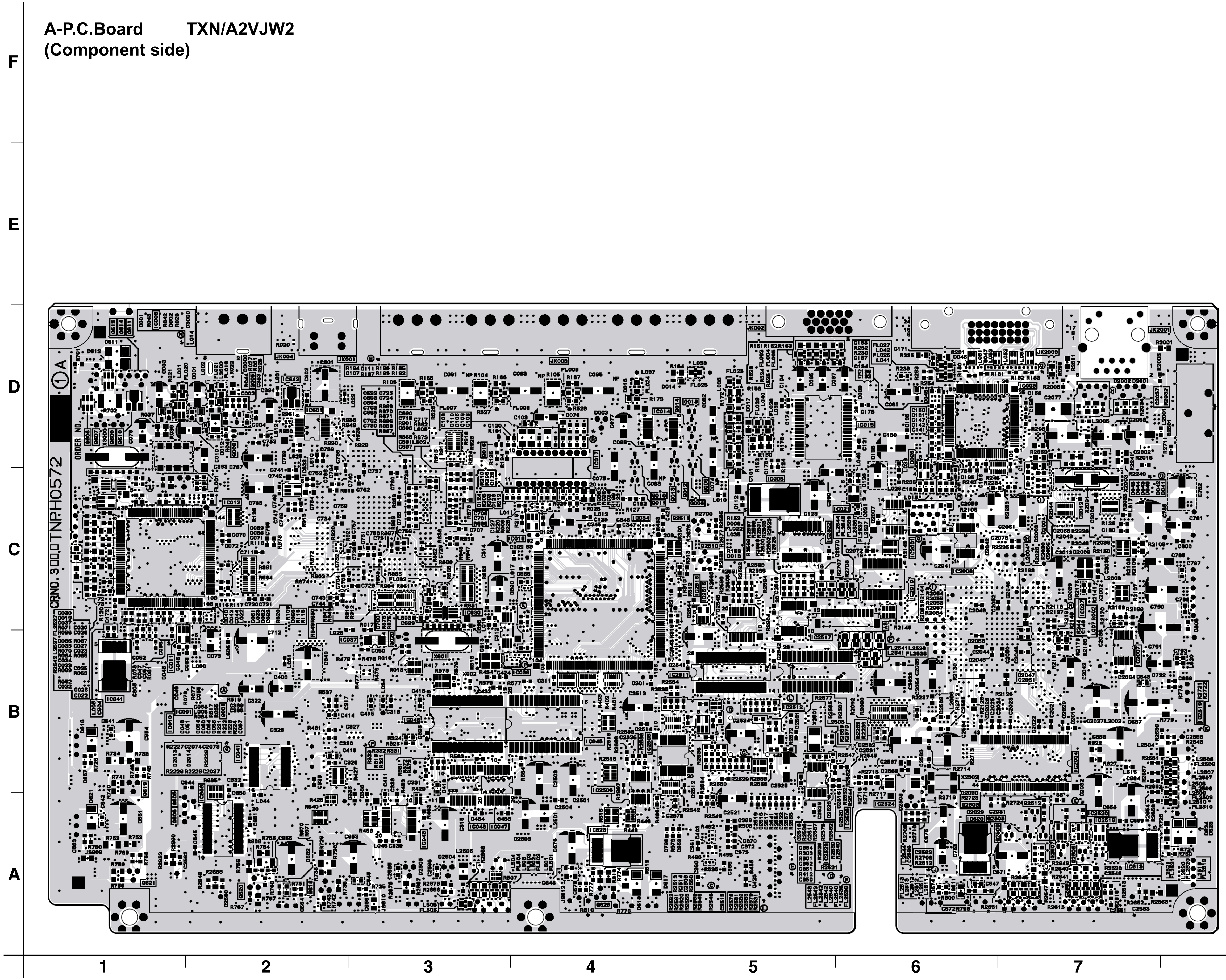
16.1. A-P.C.Board (Foil Side)


A-P.C.Board (Foil side) **TXN/A2VJW2**

A-P.C.Board (Foil Side)					
IC					
IC2002	B-2	IC2514	B-3	IC3612	B-7
IC2006	B-3	IC3011	B-1	IC3614	A-7
IC2009	C-2	IC3013	C-3	IC3615	A-6
IC2011	C-2	IC3017	C-5	IC3618	B-1
IC2014	C-2	IC3019	D-3	IC3621	A-2
IC2501	B-5	IC3020	D-2	IC3625	B-1
IC2502	B-4	IC3025	D-3	IC3627	A-1
IC2503	B-4	IC3035	C-4	IC3628	A-1
IC2507	B-4	IC3036	C-5	IC3629	C-6
IC2509	C-4	IC3040	B-6	IC3631	C-7
IC2510	B-3	IC3042	A-5	IC3634	C-6
IC2511	B-5	IC3044	A-4	IC3635	A-3
IC2513	B-4	IC3611	A-6		
TRANSISTOR					
Q2001	C-2	Q3018	C-3	Q3624	A-2
Q2501	A-2	Q3031	D-4	Q3627	B-6
Q3000	C-7	Q3032	D-6	Q3628	B-7
Q3003	D-7	Q3033	D-7		
Q3007	C-7	Q3623	B-1		
TP					
TPA2001	C-2	TPA3014	C-5	TPA3611	B-6
TPA2002	C-2	TPA3015	C-5	TPA3612	D-6
TPA2003	C-1	TPA3016	C-2	TPA3613	B-6
TPA2004	C-1	TPA3017	C-2	TPA3614	D-6
TPA2005	C-1	TPA3021	B-7	TPA3617	B-8
TPA2006	B-1	TPA3023	D-3	TPA3618	A-8
TPA2007	C-1	TPA3024	D-3	TPA3619	C-6
TPA2008	B-2	TPA3025	D-3	TPA3620	B-5
TPA2501	B-4	TPA3028	B-5	TPA3621	C-5
TPA2502	A-4	TPA3029	B-5	TPA3108	A-4
TPA2503	B-3	TPA3030	B-5	TPA3109	A-4
TPA2504	A-3	TPA3031	B-5	TPA3110	A-4
TPA2505	A-3	TPA3033	B-5	TPA3111	A-4
TPA2506	A-3	TPA3603	B-5	TPA3112	B-6
TPA2507	A-3	TPA3604	C-5	TPA3113	B-5
TPA2508	A-4	TPA3605	C-5	TPA3114	B-5
TPA2509	B-4	TPA3606	B-6	TPA3118	A-6
TPA3008	D-7	TPA3607	B-6	TPA3119	B-6
TPA3011	C-7	TPA3608	B-5	TPA3123	C-4
TPA3012	C-7	TPA3609	B-5	TPA3124	C-4
TPA3013	C-2	TPA3610	D-6		

ADDRESS INFORMATION

16.2. A-P.C.Board (Component Side)



A-P.C.Board TXN/A2VJW2
(Component side)

A-P.C.Board (Component Side)

IC

IC2001	C-6	IC2524	A-6	IC3038	B-4
IC2004	B-7	IC3001	B-1	IC3041	B-2
IC2007	B-7	IC3003	D-6	IC3043	A-3
IC2008	C-6	IC3005	C-5	IC3045	B-4
IC2010	C-6	IC3008	D-1	IC3046	B-3
IC2505	B-4	IC3010	B-1	IC3047	A-3
IC2506	A-5	IC3012	C-1	IC3048	A-3
IC2508	A-4	IC3014	D-4	IC3601	D-2
IC2512	B-5	IC3015	D-5	IC3608	A-2
IC2515	C-5	IC3017	C-4	IC3613	A-7
IC2516	C-5	IC3018	C-4	IC3620	A-6
IC2517	B-5	IC3021	C-5	IC3623	A-4
IC2518	A-7	IC3026	C-6	IC3630	C-3
IC2519	B-8	IC3027	C-7	IC3633	C-2
IC2520	A-7	IC3034	C-4	IC3641	B-1
IC2522	C-5	IC3037	B-2	IC3642	D-2

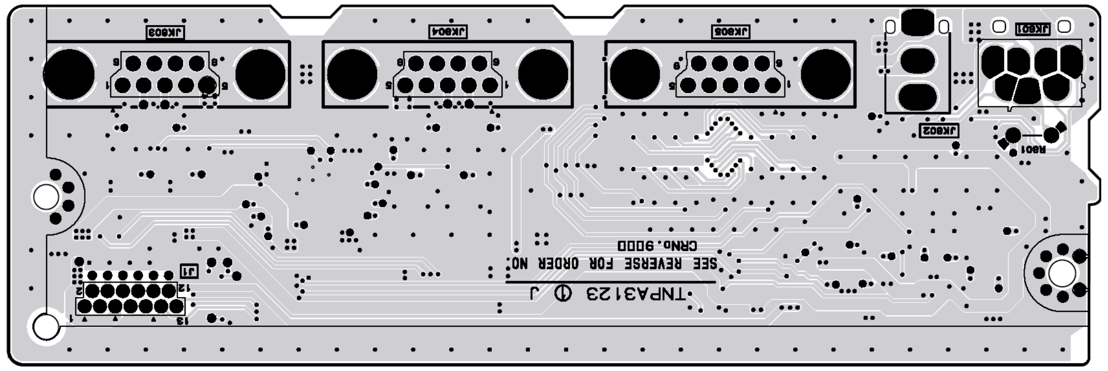
TRANSISTOR

Q2003	A-6	Q3009	C-5	Q3608	D-1
Q2005	A-6	Q3010	C-4	Q3609	D-1
Q2007	A-7	Q3011	C-4	Q3610	D-1
Q2008	A-7	Q3012	C-5	Q3611	D-1
Q2009	A-6	Q3013	C-4	Q3614	D-1
Q2010	C-5	Q3014	D-4	Q3615	D-1
Q2011	C-4	Q3015	D-5	Q3619	A-1
Q2012	A-7	Q3016	D-3	Q3620	A-2
Q3001	B-2	Q3020	B-3	Q3621	A-1
Q3005	D-2	Q3605	A-1	Q3629	A-4
Q3006	D-2	Q3606	A-1		
Q3008	C-5	Q3607	D-1		

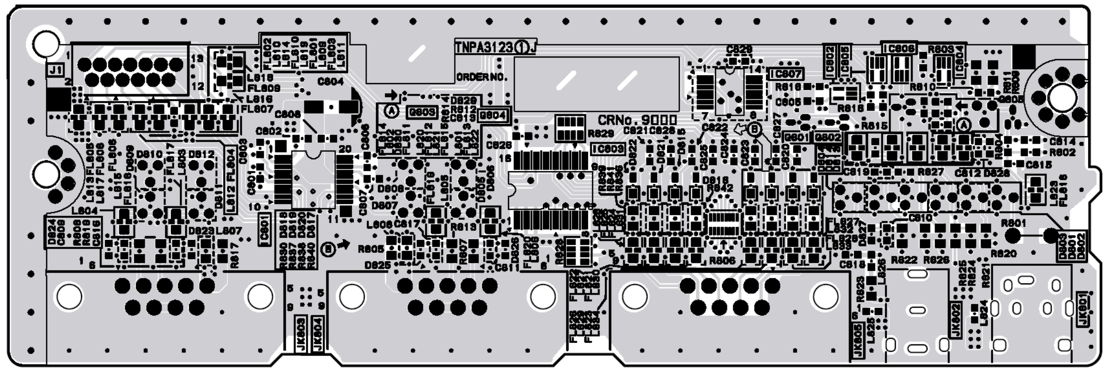
ADDRESS INFORMATION

16.3. J-P.C.Board

J-P.C.Board TXN/J1VJW2
(Foil side)


JK803
JK804
JK805
JK802
JK801
R801
J1
TNPA3123 ① J
SEE REVERSE FOR ORDER NO.
CRNo.9000

J-P.C.Board TXN/J1VJW2
(Component side)


TNPA3123①J
ORDER NO.
CRNo. 9000
J1
JK803
JK804
JK805
JK802
JK801
R801
IC9801
IC9802
IC9803
IC9804
IC9805
IC9806
Q9801
Q9802
Q9803
Q9804
Q9805

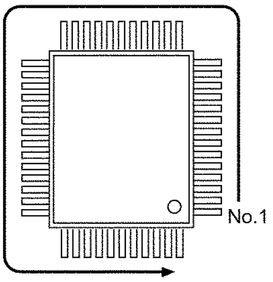
J-P.C.Board (Component Side)			
IC			
IC9801	B-1	IC9804	B-4
IC9802	B-3	IC9805	B-3
IC9803	B-3	IC9806	B-4
TRANSISTOR			
Q9801	B-3	Q9804	B-2
Q9802	B-3	Q9805	B-4
Q9803	B-2		

ADDRESS INFORMATION

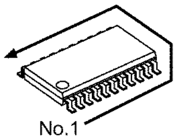
F
E
D
C
B
A

1 2 3 4 5 6 7 8 9

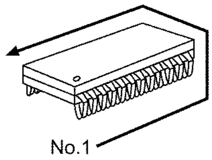
17 Terminal guide of ICs and transistors



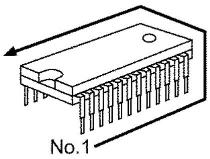
C5CB00000034	128 Pin



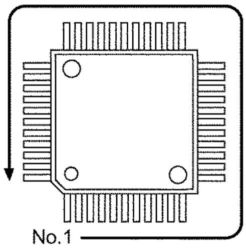
C0FBBD000086	20 Pin
C0JBAZ000801	16 Pin
C0JBAB000290	14 Pin
C0JBAZ001437	20 Pin
C0JBAZ001467	20 Pin
C0ZBZ0000924	28 Pin
C0ZBZ0000925	28 Pin
C0JBAR000370	16 Pin
C0JBAF000315	20 Pin
C1AB00002017	36 Pin
C3ABQJ000023	86 Pin
C0JBCZ000485	56 Pin
C3ABPJ000035	86 Pin



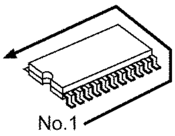
C3BBFC000290	28 Pin



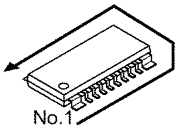
M52036SP	20 Pin



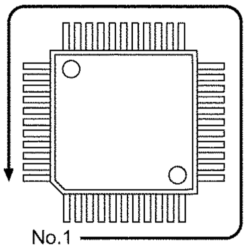
C1AB00001868	144 Pin
C0FBAD000096	100 Pin
C1AB00001913	208 Pin
C1ZBZ0002603	208 Pin



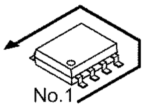
C0JBAR000126	16 Pin



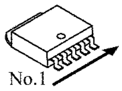
C0GBA0000010	16 Pin



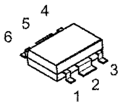
C2DBYH000017	112 Pin



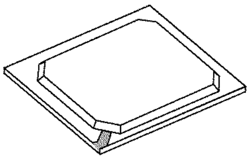
C0EBB0000024	8 Pin
C1DB00001208	8 Pin
C0GBG0000004	10 Pin



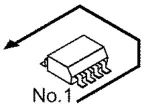
C0DBCFG00011	5 Pin
C0DBEZE00002	5 Pin
C0DBZHE00019	5 Pin
C0DBEKG00005	5 Pin
C0CBCBF00001	5 Pin
C0DBCGE00004	5 Pin
C0CBCAG00007	5 Pin
C0DBCFG00010	5 Pin



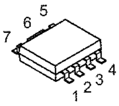
C0DBZFF00003	6 Pin



C2DBMY000001
C1AB00001926



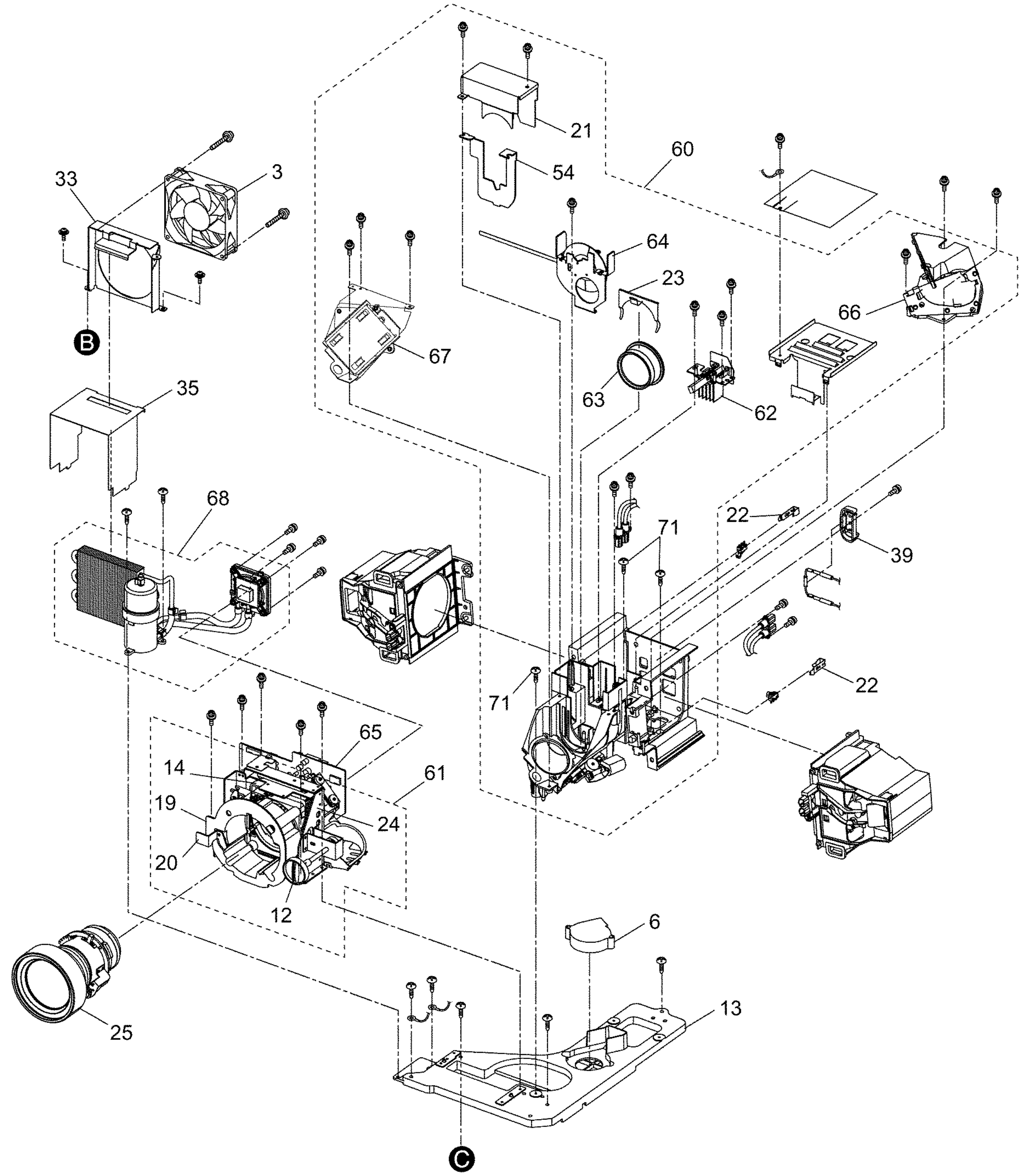
C3EBDC000046	8 Pin



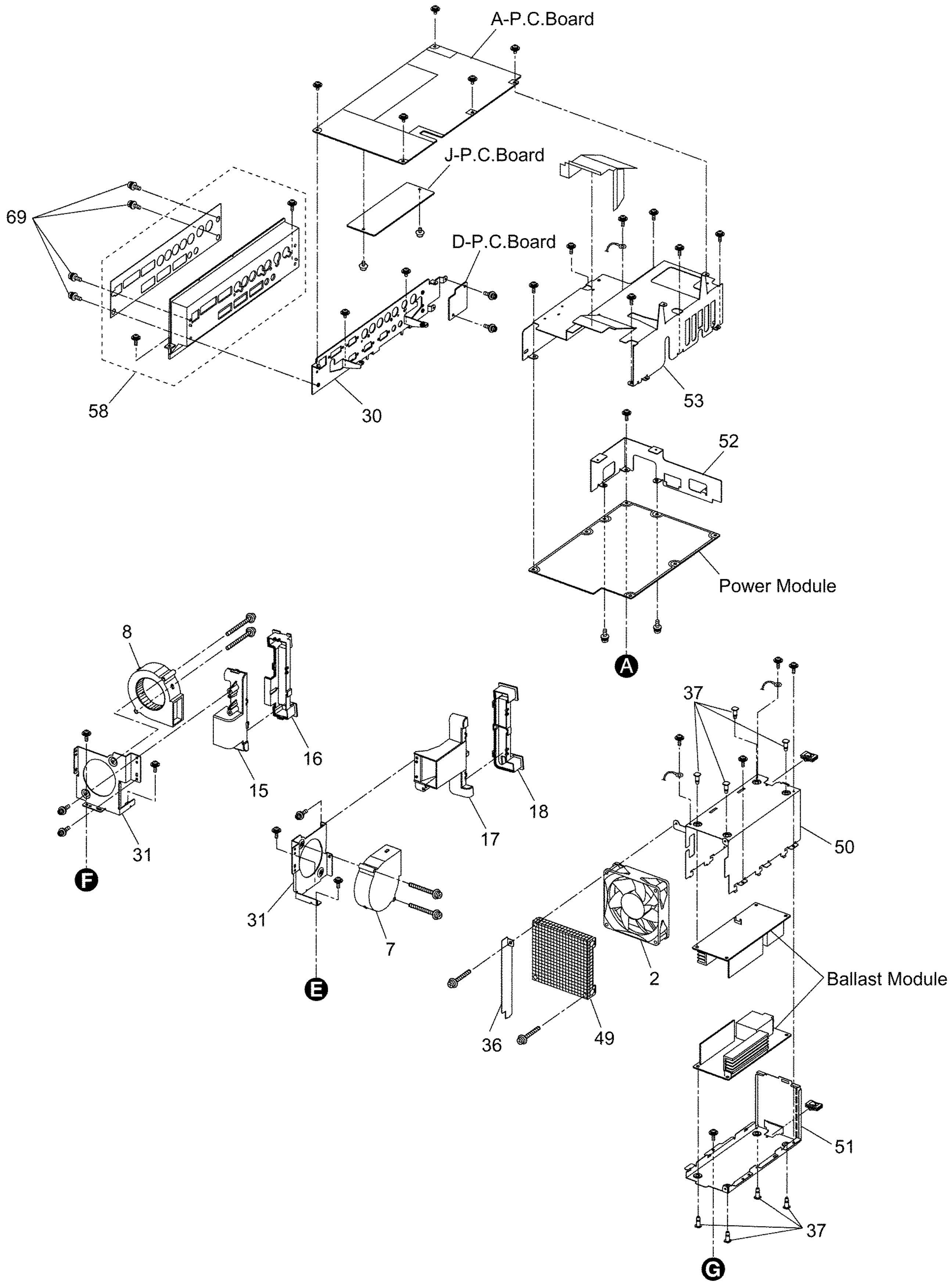
C0DBFFD00003	7 Pin

18 Exploded Views

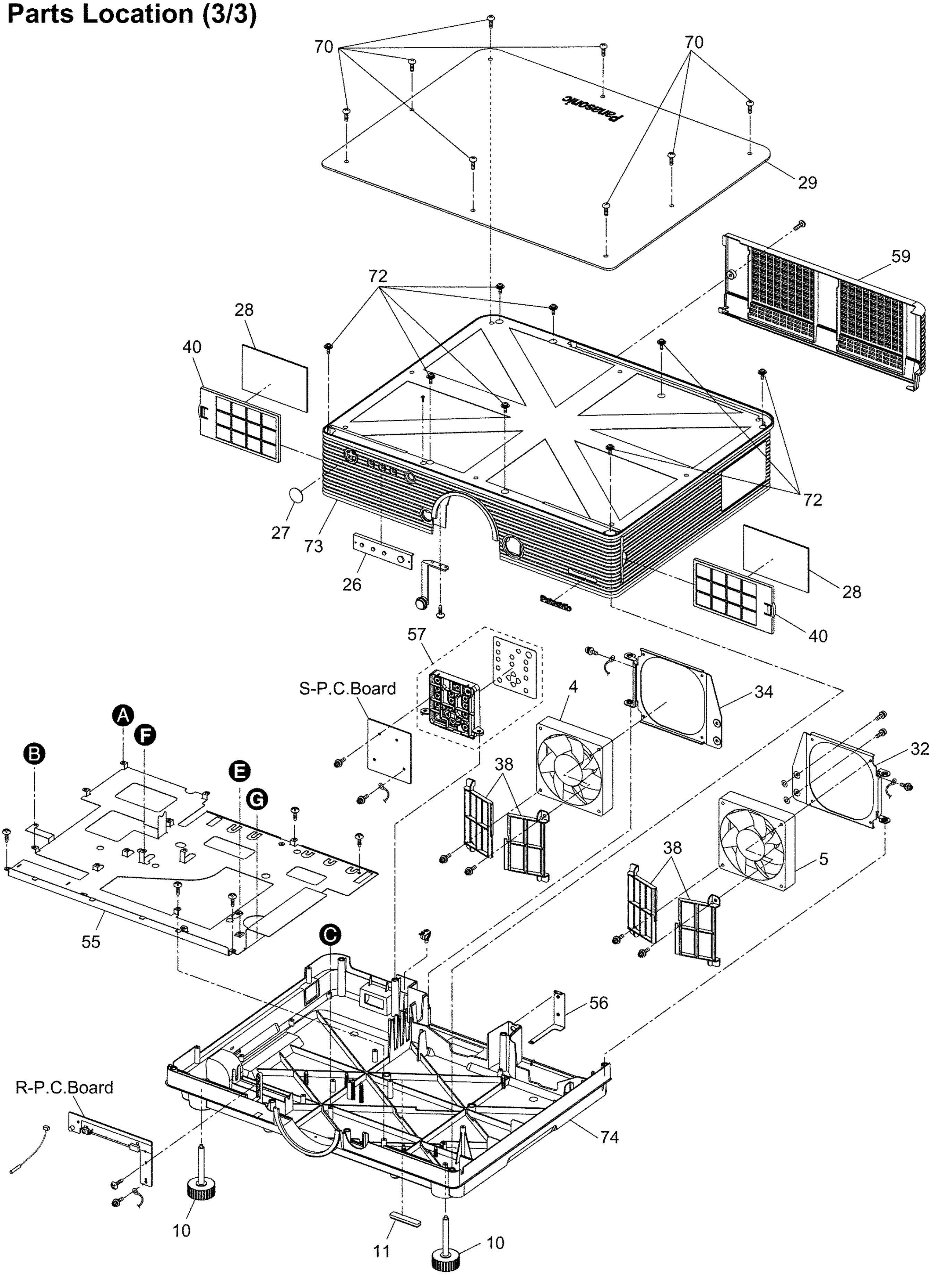
Parts Location (1/3)


21
60
33
3
54
64
23
66
67
B
35
63
62
68
22
71
39
71
22
65
14
61
19
24
20
12
6
13
25
C

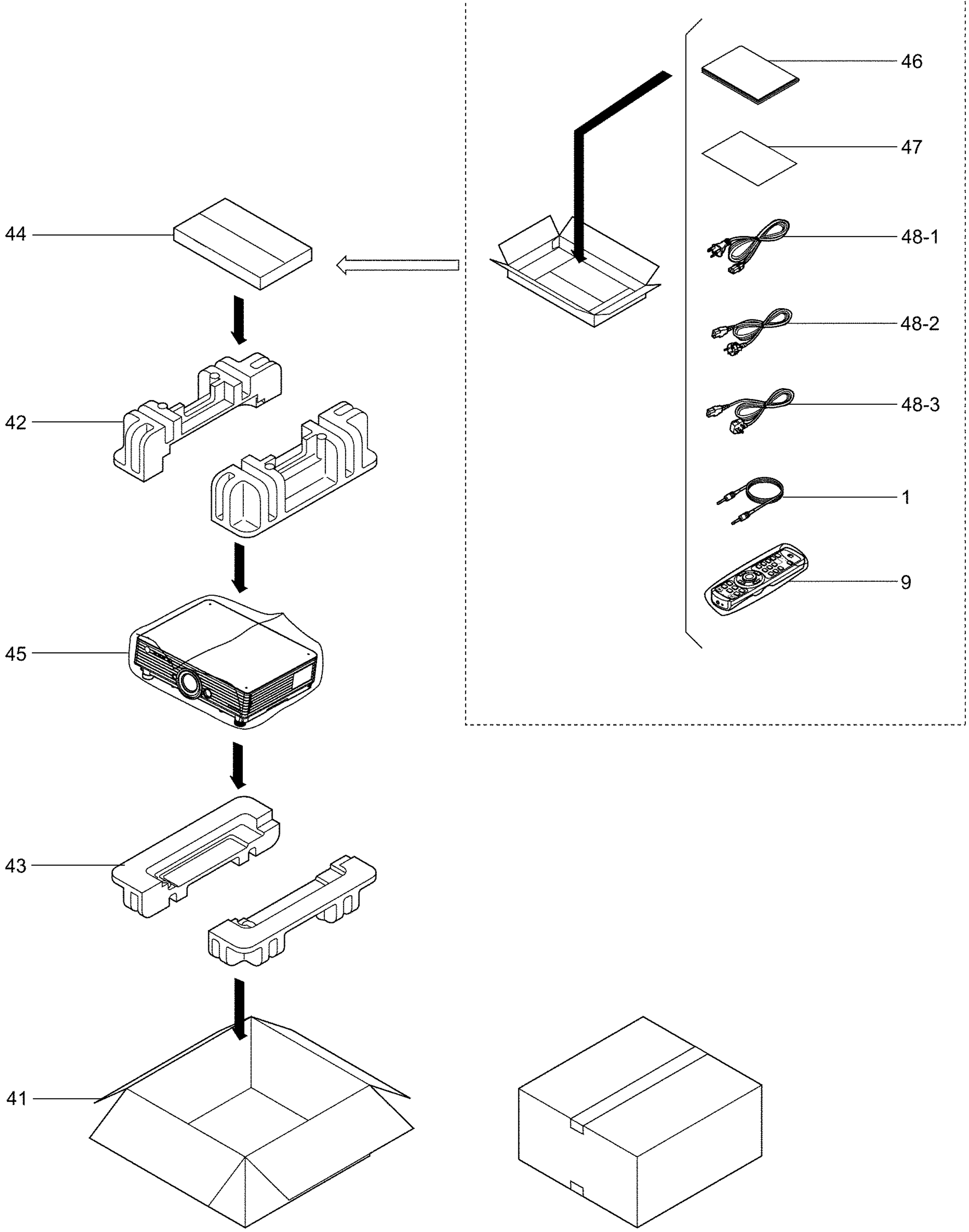
Parts Location (2/3)


A-P.C.Board
J-P.C.Board
D-P.C.Board
69
58
30
53
52
Power Module
A
8
16
15
31
F
37
17
18
50
31
7
E
2
Ballast Module
36
49
51
37
G

Parts Location (3/3)


70
70
29
59
72
28
40
27
73
26
72
28
40
57
S-P.C.Board
4
34
A
F
B
E
G
38
32
38
5
55
C
56
R-P.C.Board
74
10
11
10

Packing Parts


46
47
48-1
48-2
48-3
1
9
44
42
45
43
41

19 Replacement Parts List

Important Safety Notice

Components identified by the International symbol ⚠ have special characteristics important for safety.
When replacing any of these components, use only the manufacturer's specified parts.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Carbon	F : – 1 %
F : Fuse	G : – 2 %
M : Metal Oxide	J : – 5 %
Metal Film	K : –10%
S : Solid	M : –20%
W : Wire Wound	

2. Capacitor

Example:

ECKF1H103ZF C 0.01PF, Z, 50V

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic	C : –0.25 pF
E : Electrolytic	D : –0.5 pF
P : Polyester	F : – 1 pF
PP : Polypropylene	J : – 5 %
S : Polystyrol	K : –10 %
T : Tantalum	L : –15 %
	M : –20 %
	P : +100 %, -0 %
	Z : +80 %, -20 %

Notes:

Printed circuit board assembly with mark (RTL) is no longer available after production discontinuation of the complete set.

Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANICAL PARTS	
	D4CDH4930004	THERMISTER(OPTICAL)	
	D4CDH4930005	THERMISTER	
	K0AACE000013	POWER SWITCH	
1	K1EA03NA0001	REMOTE CONTROLL CABLE	
	K2AH3G000009	AC INLET	⚠
48-1	K2CF3EH00001	POWER CORD	⚠ PT-D5500U/UL
48-2	K2AZ3Z000003	POWER CORD(EUROPE)	⚠ PT-D5500E/EL
48-3	K2CM3EH00005	POWER CORD(U.K)	⚠ PT-D5500E/EL
	K3GE1PB00003	FUSE HOLDER	PT-D5500U/UL
	K3GE1ZB00002	FUSE HOLDER	PT-D5500E/EL
	K5D123AQA001	FUSE	⚠ PT-D5500U/UL
	K5D632BN0004	FUSE	⚠ PT-D5500E/EL
2	L6FAMEGH0011	BALLAST COOLING FAN	⚠
3	L6FAMEGH0012	POWER COOLING FAN	⚠
4	L6FAPEHH0004	EXHAUST FAN(L)	⚠
5	L6FAPEHH0005	EXHAUST FAN(R)	⚠
6	L6FCJC9H0006	COOLING FAN(OPTICAL)	⚠
7	L6FCLECH0001	INHALATION FAN(L)	⚠
8	L6FCLECH0002	INHALATION FAN(R)	⚠
9	N2QAEA000023	REMOTE CONTROLLER	
10	TBLB3081	ADJUSTER	
11	TBLG3042	RUBBER LEG (REAR)	
	TBMA159	PANASONIC BADGE	
	TBMF639	MODEL NAME PLATE	PT-D5500U
	TBMF641	MODEL NAME PLATE	PT-D5500E
	TBMF644	MODEL NAME PLATE	PT-D5500UL
	TBMF646	MODEL NAME PLATE	PT-D5500EL
	TBMF640	MODEL NO. LABEL	PT-D5500U
	TBMF642	MODEL NO. LABEL	PT-D5500E
	TBMF645	MODEL NO. LABEL	PT-D5500UL
	TBMF647	MODEL NO. LABEL	PT-D5500EL
	TBXA44501	LENS RELEASE BUTTON	
12	TBXA44601	HORIZONTAL ADJUST KNOB	
13	TEDC5087	OPTICAL BASE	
14	TEEC0033-1	LENS EXCHANGE UNIT	
15	TEEC5157	INHALATION DUCT 1(R)	
16	TEEC5158	INHALATION DUCT 2(R)	
17	TEEC5159	INHALATION DUCT 1(L)	
18	TEEC5160	INHALATION DUCT 2(L)	
19	TEEC5168	LEND GUIDE	
20	TEKX030	LENS EXCHANGE LEVER	
21	TENC5272	CW COVER	
	TENC5285	GUIDE PLATE(R/L)	
22	TENC5287	SW SUPPORT METAL	
23	TESA235	LENS HOLDER SPRING	
24	TGAX034	ELECTRIC SHIFT MOUNT	
	THEC035N	SCREW	
25	TKGF0109	LENS	⚠ PT-D5500U/E
26	TKKC5156	LED DIFFUSION PLATE	
27	TKKC5194	REMOTE CONTROL RECEIVER	(FRONT)
	TKKL5244-1	LENS COVER	
28	TKNE053	FILTER	
29	TKRA40201	TOP PLATE	
30	TKZF5036	TERMINAL METAL	
31	TKZJ5055	INHALATION FAN METAL(R/L)	
32	TKZJ5056	EXHAUST FAN METAL(L)	
33	TKZJ5057	POWER FAN INSTAL METAL	
34	TKZJ5058	EXHAUST FAN METAL(R)	
	TMKG389	FAN SPONGE	
	TMKG481	PROTECTION DUST SHEET(FAN)	
	TMKG482	PROTECTION DUST SHEET(DUCT)	
	TMKG518	SPONGE 1	
	TMKG519	SPONGE 2	
	TMKG522	SPONGE 3	
	TMKG530	SPONGE SPACER	
	TMKK217	RUBBER WASHER	
	TMKX100	WASHER	
35	TMKX721-1	SHEET 1	
36	TMKX750	SHEET 2	
	TMKX751	SHILICON RUBBER	
	TMKX778-1	POWER SHEET	
	TMKX779	SHEET	
	TMKX788	FAN SHEET	
	TMKX801	SHEET	
	TMM7468-1	SPACER	
	TMME211	EDGE HOLDER	

Ref. No.	Part No.	Part Name & Description	Remarks
37	TMME240	P.C.B SPACER	
	TMME245	SPACER	
38	TMMX119	SHADING LOUVER (EXHAUST R/L)	
39	TMXC017	TEMP FUSE METAL	
40	TMZX5046	FILTER COVER	
41	TPCB63702	CARTON	PT-D5500U
	TPCB63703	CARTON	PT-D5500E
	TXFPC99PWHZ	CARTON	PT-D5500UL
	TXFPC99PWKZ	CARTON	PT-D5500EL
42	TPDA1025	CUSHION 1	
43	TPDA1026	CUSHION 2	
	TPDA1041	LENS PAD	PT-D5500UL/EL
44	TPDF1311	ACCESSARY PACKING CASE	
45	TPEH187-1	SET COVER	
	TQB817002-1	SAFETY SHEET	PT-D5500U/UL
47	TQBH7017	SHEET (PASSWORD)	
46	TQBJ0148-1	INSTRUCTION BOOK	⚠ PT-D5500U/UL
	TQBJ0149-1	INSTRUCTION BOOK	⚠ PT-D5500E/EL
	TQD1712010	SHEET	
	TQDJ18018	GUARANTEE CARD	PT-D5500U/UL
	TQF86202	LABEL	
	TSK1018	FERRITE CORE	⚠ J0KG00000013
	TSXL419	FLEXIBLE CABLE (A2 - R1)	
	TSXL420	FLEXIBLE CABLE (A1 - S1)	
	TSXL421	FLEXIBLE CABLE (A3 - J1)	
	TSXL423	FLEXIBLE CABLE (A41 - FM1)	
	TUCA5010	OFF PLATE	
	TUCB5037	ALUMINUM SHEET 1	
	TUCB5038	ALUMINUM SHEET 2	
49	TUCC5802-1	EXHAUST FAN SHIELD PLATE	
50	TUCC5993	BALLAST SHIELD CASE 1	
51	TUCC5994	BALLAST SHIELD CASE 2	
52	TUCC5995	POWER SHIELD METAL 1	
53	TUCC5996	POWER SHIELD METAL 2	
	TUCC5542	CW HEAT SINK	
54	TUCJ5526	ROD RADIATION BOARD	
55	TUCX5176	BESE METAL	
56	TUCX5177	FAN GROUND METAL	
	TUXK039	FAN SPACER 1	
	TUXK040	FAN SPACER 2	
57	TXFBX01VJW2	CONTROL BUTTON	
58	TXFPA01VJW2	TERMINAL COVER ASSY	
59	TXFKP99PWGZ	LAMP COVER ASSY	
	TXFSE01VJW2	GROUND LEAD (A7 - LAMP)	
	TXFSE02VJW2	GROUND LEAD (A8 - LAMP)	
	TXFSE03VJW2	FAIL-SAFE SWITCH	
	TXFSE04VJW2	LEAD WIRE(A61)WITH MOTOR	
	TXJ/E1VJW2	INLET GROUND	
	TXJ/E2VJW2A	GROUND LEAD	BALLAST-VENTILATION FAN(L)
	TXJ/E3VJW2	GROUND LEAD	VENTILATION FAN(R)-POWER
	TXJ/E4VJW2	GROUND LEAD	BALLAST-ANALYSIS CASE
	TXJ/E5VJW2	GROUND LEAD	BALLAST-ANALYSIS CASE
	TXJ/E6VJW2	GROUND WIRE	
	TXJ/E7VJW2	GROUND WIRE	
	TXJ/E8VJW2	GROUND WIRE	S-PCB,DMD BLOCK
	TXJ/L3VJW2	LEAD WIRE(BALLAST LEAD)	
	TXJ/P1VJW2	LEAD WIRE (P1 - TEMP FUSE)	
	TXJ/P2VJW2	LEAD WIRE (P2/P3 - CN1)	
	TXJ/P7VJW2	LEAD WIRE(P7 - FM2)	
	TXJA20VJW2	LEAD WIRE(A20 - D1)	
	TXJA40VJW2	LEAD WIRE(A40 - FM3)	
	TXJA42VJW2	LEAD WIRE(A42 - P5)	
	TXJA43VJW2	LEAD WIRE(A43 - P6)	
	TXJA5VJW2	LEAD WIRE (A5 - BALLAST)	
	TXJA6VJW2	LEAD WIRE (A6 - BALLAST)	
	TXJFM5VJW2	LEAD WIRE(FM5 - CW1)	
60	TXZEC01VJW2	ANALYSIS BLOCK	
61	TXZEC02VJW2	LENS MOUNT	
62	TXZKG02VJW2	ROD ASSY	
63	TXZKG03VJW2	RELAY LENS HOLDER	
	TXZKG04VJW2	LENS HOLDER	
64	TXZKG05VJW2	COLOR WHEEL ASSY	
65	TXZKG06VJW2	DMD BLOCK	
66	TXZKJ01VJW2	OPTICAL MIRROR ASSY	
67	TXZKJ02VJW2	REFLECT MIRROR ASSY	
68	UDLS015AVA	COOLING UNIT ASSY	
	XQN2+C2FZZ	SCREW	
	XQN2+C3FZ	SCREW	
69	XSB3+8FN	SCREW	
70	THEC081M	SCREW	
	XTBT969Z	SCREW	
	XTN3+4F	SCREW	
	XTW3+8P	SCREW	
	XUC3FY	WASHER	
	XYN2+J18	SCREW	
	XSB2+8FJ	SCREW	
	XYN3+F18J	SCREW	
	XYN3+F30	SCREW	
	XYN3+F6	SCREW	
71	XYN3+F8	SCREW	
	XYN3+F8FJ	SCREW	
	XYN3+J8FJ	SCREW	
	XSN3+8FJ	SCREW	
	XSB4+10FC	SCREW	
	XYN4+E8	SCREW	
	XYN4+F30	SCREW	
72	XYN4+J10	SCREW	
	XYN4+J30	SCREW	
	XYN4+J35	SCREW	
	XZBT6532	BAG	PT-D5500U/UL
73	TXFKF99PWGZ	UPPER COVER	PT-D5500U
	TXFKF99PWJZ	UPPER COVER	PT-D5500E
	TXFKF99PWHZ	UPPER COVER	PT-D5500UL
	TXFKF99PWKZ	UPPER COVER	PT-D5500EL
74	TXFKF98PWGZ	BOTTOM COVER	PT-D5500U
	TXFKF98PWJZ	BOTTOM COVER	PT-D5500E
	TXFKF98PWHZ	BOTTOM COVER	PT-D5500UL
	TXFKF98PWKZ	BOTTOM COVER	PT-D5500EL
[INTEGRATED CIRCUIT]			
IC2001	C0JBAB000290	I.C	
IC2002	C5CB00000060	I.C	
IC2004	C3ABQJ000023	I.C	
IC2006	TVRN299	I.C	
IC2007	C0EBB0000024	I.C	
IC2008	C0DBFFD00003	I.C	
IC2009	C2DBMY000001	I.C	
IC2011	C0CBCBF00001	I.C	
IC2014	TC7SH08F	I.C	
IC2501	C0CBCBF00001	I.C	
IC2502	TC74HC4051AF	I.C	C0JBAR000126
IC2503	TC74HC4051AF	I.C	C0JBAR000126
IC2505	C0JBAZ001467	I.C	
IC2506	C0EBB0000024	I.C	
IC2507	C2DBYH000017	I.C	
IC2508	C3EBLC000019	I.C	
IC2509	TVRN298	I.C	
IC2510	C0JBAB000621	I.C	

Ref. No.	Part No.	Part Name & Description	Remarks
IC2511	C3BBFC000290	I.C	
IC2512	C3BBFC000290	I.C	
IC2513	TC7SH32FTL	I.C	C0JBAE000146
IC2514	TC7SH32FTL	I.C	C0JBAE000146
IC2515	TC7SH32FTL	I.C	C0JBAE000146
IC2516	TC74LCX574FT	I.C	
IC2517	TC74LCX574FT	I.C	
IC2518	TC7SH08F	I.C	
IC2519	TC7SH08F	I.C	
IC2520	TC7SH08F	I.C	
IC2522	JLC1562BFEL	I.C	C0JBAZ000801
IC2523	TC7SH08F	I.C	
IC2524	C1DB00001208	I.C	
IC3001	C0JBAB000633	I.C	
IC3003	C0FBAD000096	I.C	
IC3005	C0DBZHE00019	I.C	
IC3008	C1AB00001466	I.C	
IC3010	C0CBCAD00012	I.C	
IC3011	C0CBCAD00012	I.C	
IC3012	C1AB00001868	I.C	
IC3014	C0JBAR000370	I.C	
IC3015	C1AB00002017	I.C	
IC3017	M52036SP	I.C	C1AA00000392
IC3018	C0JBAA000359	I.C	
IC3019	C0DBCGE00004	I.C	
IC3020	C0CBCBD00008	I.C	
IC3025	C3EBDC000046	I.C	
IC3034	C1AB00001913	I.C	
IC3035	C3ABPJ000035	I.C	
IC3036	C0CBCAG00007	I.C	
IC3037	C0JBAS000229	I.C	
IC3038	C0JBAZ002128	I.C	
IC3040	C0DBCFG00010	I.C	
IC3041	JLC1562BFEL	I.C	C0JBAZ000801
IC3042	C1ZBZ0002603	I.C	
IC3043	C0JBAZ001437	I.C	
IC3044	C0JBCZ000512	I.C	
IC3045	C0ZBZ0000924	I.C	
IC3046	C0ZBZ0000925	I.C	
IC3047	C0JBAZ001467	I.C	
IC3048	C0JBAZ001467	I.C	
IC3601	C0JBAB000290	I.C	
IC3608	M62393FP	I.C	C0FBBD000085
IC3611	C0DBEKG00005	I.C	
IC3612	C0DBEZE00002	I.C	
IC3613	C0DBEKG00005	I.C	
IC3614	C0DBEZE00002	I.C	
IC3615	C0DBEKG00005	I.C	
IC3618	C0DBEKG00005	I.C	
IC3620	C0DBEKG00005	I.C	
IC3621	C0DBAJE00007	I.C	
IC3623	C0DBEZE00002	I.C	
IC3625	C0DBEKG00005	I.C	
IC3627	LB1930M-TLM	I.C	C0GBG0000004
IC3628	LB1831M	I.C	C0GBD0000002
IC3629	C1AB00001926	I.C	
IC3631	C3ABPJ000035	I.C	
IC3633	C0CBCAC00096	I.C	
IC3634	C0DBZFF00003	I.C	
IC3635	LB1930M-TLM	I.C	C0GBG0000004
IC3641	C0DBCFG00011	I.C	
IC9601	B3NBB0000005	I.C	
IC9602	C0BBBA000076	I.C	
IC9801	C1CB00001750	I.C	
IC9802	C0JBAB000621	I.C	
IC9803	JLC1562BFEL	I.C	C0JBAZ000801
IC9804	C0JBAB000621	I.C	
IC9805	C0JBAB000621	I.C	
IC9806	C0JBAB000621	I.C	
		[TRANSISTORS]	
Q2001	2SD1819A	TRANSISTOR	2SD1819AW
Q2501	2SD1819A	TRANSISTOR	2SD1819AW
Q2503	2SD1819A	TRANSISTOR	2SD1819AW
Q2505	2SD1819A	TRANSISTOR	2SD1819AW
Q2507	2SD1819A	TRANSISTOR	2SD1819AW
Q2508	2SD1819A	TRANSISTOR	2SD1819AW
Q2509	2SB1218A	TRANSISTOR	
Q2510	B1CBHD000001	TRANSISTOR	
Q2511	B1CBHD000001	TRANSISTOR	
Q2512	2SB1218A	TRANSISTOR	
Q3000	2SD1030	TRANSISTOR	
Q3001	2SD1030	TRANSISTOR	
Q3003	2SD1819A	TRANSISTOR	2SD1819AW
Q3005	2SD1819A	TRANSISTOR	2SD1819AW
Q3006	2SB1218A	TRANSISTOR	
Q3007	2SB1218A	TRANSISTOR	
Q3008	2SD1819A	TRANSISTOR	2SD1819AW
Q3009	2SB1218A	TRANSISTOR	
Q3010	2SD1819A	TRANSISTOR	2SD1819AW
Q3011	2SB1218A	TRANSISTOR	
Q3012	2SD1819A	TRANSISTOR	2SD1819AW
Q3013	2SB1218A	TRANSISTOR	
Q3014	2SD1819A	TRANSISTOR	2SD1819AW
Q3015	2SB1218A	TRANSISTOR	
Q3016	2SD1819A	TRANSISTOR	2SD1819AW
Q3018	2SD1819A	TRANSISTOR	2SD1819AW
Q3020	2SD1819A	TRANSISTOR	2SD1819AW
Q3031	2SD1819A	TRANSISTOR	2SD1819AW
Q3032	2SD1819A	TRANSISTOR	2SD1819AW
Q3033	2SB1218A	TRANSISTOR	
Q3605	2SK620	FET	2SK0620
Q3606	2SK620	FET	2SK0620
Q3607	2SD601A-R	TRANSISTOR	2SD0601AR
Q3608	B1DHDD000020	TRANSISTOR	
Q3609	2SD601A-R	TRANSISTOR	2SD0601AR
Q3610	2SK060100L	TRANSISTOR	
Q3611	2SD601A-R	TRANSISTOR	2SD0601AR
Q3614	2SD601A-R	TRANSISTOR	2SD0601AR
Q3615	B1DHDD000020	TRANSISTOR	
Q3618	2SD601A-R	TRANSISTOR	2SD0601AR
Q3619	2SD601A-R	TRANSISTOR	2SD0601AR
Q3620	2SD601A-R	TRANSISTOR	2SD0601AR
Q3621	2SD601A-R	TRANSISTOR	2SD0601AR
Q3623	2SD601A-R	TRANSISTOR	2SD0601AR
Q3624	2SD601A-R	TRANSISTOR	2SD0601AR
Q3627	2SB1218A	TRANSISTOR	
Q3628	2SB1218A	TRANSISTOR	
Q3629	2SD601A-R	TRANSISTOR	2SD0601AR
Q9801	2SD1819A	TRANSISTOR	2SD1819AW
Q9802	2SB1218A	TRANSISTOR	
Q9803	2SD1819A	TRANSISTOR	2SD1819AW
Q9804	2SB710A	TRANSISTOR	2SB0710A
Q9805	2SB1218A	TRANSISTOR	
		[DIODES]	
D2001	MA157A	DIODE	MA3X157A
D2002	MA157A	DIODE	MA3X157A
D2003	MA157A	DIODE	MA3X157A
D2004	MA157A	DIODE	MA3X157A
D2005	LNJ308G8TRA	LED	
D2006	LNJ308G8TRA	LED	
D2007	LNJ308G8TRA	LED	
D2008	LNJ308G8TRA	LED	
D2013	MA152WK	DIODE	MA3X152E
D2014	MA152WK	DIODE	MA3X152E
D2501	B3ABB0000189	DIODE	
D2503	B3ABB0000189	DIODE	
D2504	MA157A	DIODE	MA3X157A
D2505	MA157A	DIODE	MA3X157A
D2508	MA152WK	DIODE	MA3X152E
D2509	MA152WK	DIODE	MA3X152E
D2510	B3ABB0000189	DIODE	
D2511	B3ABB0000189	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D2512	B3ABB0000189	DIODE	
D3000	MA8056M	DIODE	MAZ80560M
D3001	MA8056M	DIODE	MAZ80560M
D3002	MA8056M	DIODE	MAZ80560M
D3003	MA157A	DIODE	MA3X157A
D3004	MA157A	DIODE	MA3X157A
D3005	MA157A	DIODE	MA3X157A
D3009	MA157A	DIODE	MA3X157A
D3013	MA8056M	DIODE	MAZ80560M
D3014	MA8056M	DIODE	MAZ80560M
D3015	MA157A	DIODE	MA3X157A
D3016	MA157A	DIODE	MA3X157A
D3017	MA8056M	DIODE	MAZ80560M
D3018	MA8056M	DIODE	MAZ80560M
D3019	MA157A	DIODE	MA3X157A
D3020	MA157A	DIODE	MA3X157A
D3021	MA157A	DIODE	MA3X157A
D3022	MA157A	DIODE	MA3X157A
D3023	MA157A	DIODE	MA3X157A
D3024	MA157A	DIODE	MA3X157A
D3026	MA8056M	DIODE	MAZ80560M
D3027	MA8056M	DIODE	MAZ80560M
D3036	MA2Z72000L	DIODE	
D3037	MA2Z72000L	DIODE	
D3040	EZJZ0V80008B	VARISTOR	
D3041	EZJZ0V80008B	VARISTOR	
D3042	EZJZ0V80008B	VARISTOR	
D3043	EZJZ0V80008B	VARISTOR	
D3044	EZJZ0V80008B	VARISTOR	
D3045	EZJZ0V80008B	VARISTOR	
D3046	EZJZ0V80008B	VARISTOR	
D3047	EZJZ0V80008B	VARISTOR	
D3048	MA8056M	DIODE	MAZ80560M
D3611	B0JCPD000010	DIODE	
D3612	B0JCPD000010	DIODE	
D3616	B0JCPD000010	DIODE	
D3617	B0JCPD000010	DIODE	
D3618	B0JCPD000010	DIODE	
D3621	B0JCPD000010	DIODE	
D3622	B0JCPD000010	DIODE	
D3623	B0JCPD000010	DIODE	
D3624	B0JCPD000010	DIODE	
D3625	B0JCPD000010	DIODE	
D9701	B0HCMM000001	DIODE	
D9702	MAZY12000L	DIODE	
D9802	MA157A	DIODE	MA3X157A
D9813	MA157A	DIODE	MA3X157A
D9815	MA8056M	DIODE	MAZ80560M
D9816	MA8056M	DIODE	MAZ80560M
D9817	MA8056M	DIODE	MAZ80560M
D9818	MA8056M	DIODE	MAZ80560M
D9819	MA8056M	DIODE	MAZ80560M
D9820	MA8056M	DIODE	MAZ80560M
D9821	MA8056M	DIODE	MAZ80560M
D9822	MA8056M	DIODE	MAZ80560M
D9823	D4ED1270A006	VARISTOR	
D9824	D4ED1270A006	VARISTOR	
D9825	D4ED1270A006	VARISTOR	
D9826	D4ED1270A006	VARISTOR	
D9827	D4ED1120A002	VARISTOR	
D9828	D4ED1120A002	VARISTOR	
D9829	D4ED1120A002	VARISTOR	
D9830	D4ED1120A002	VARISTOR	
D9901	LNJ107W5ARA1	LED	
D9902	LNJ208R8ARA	LED	
D9903	LNJ208R8ARA	LED	
D9904	LNJ208R8ARA	LED	
		[COILS]	
L2001	J0JJC0000022	EMI FILTER	
L2002	J0JJC0000022	EMI FILTER	
L2003	J0JJC0000022	EMI FILTER	
L2004	J0JJC0000022	EMI FILTER	
L2005	J0JJC0000022	EMI FILTER	
L2006	J0JJC0000022	EMI FILTER	
L2501	ELJFA6R8JB	CHIP COIL	
L2502	ELJFA6R8JB	CHIP COIL	
L2503	ELJFA470JF	COIL	
L2504	ELJFA6R8JB	CHIP COIL	
L2505	ELJFA6R8JB	CHIP COIL	
L2544	J0JJC0000022	EMI FILTER	
L3003	ELJFA100JF	COIL	
L3004	ELJFA100JF	COIL	
L3005	J0JJC0000022	EMI FILTER	
L3006	J0JJC0000022	EMI FILTER	
L3008	J0JJC0000022	EMI FILTER	
L3009	TLTAZ100K	PEAKING COIL	G1C100KA0002
L3010	J0JJC0000022	EMI FILTER	
L3011	J0JJC0000022	EMI FILTER	
L3012	J0JJC0000022	EMI FILTER	
L3013	J0JJC0000022	EMI FILTER	
L3017	J0JJC0000022	EMI FILTER	
L3018	J0JJC0000022	EMI FILTER	
L3022	J0JJC0000022	EMI FILTER	
L3023	J0JJC0000022	EMI FILTER	
L3024	ELJFA470JF	COIL	
L3025	J0JJC0000022	EMI FILTER	
L3026	J0JJC0000022	EMI FILTER	
L3027	TLTAZ100K	PEAKING COIL	G1C100KA0002
L3028	J0JJC0000022	EMI FILTER	
L3030	J0JJC0000022	EMI FILTER	
L3031	J0JJC0000022	EMI FILTER	
L3032	J0JJC0000022	EMI FILTER	
L3034	J0JCC0000168	FILTER	
L3043	J0JJC0000022	EMI FILTER	
L3044	J0JJC0000022	EMI FILTER	
L3045	J0JJC0000022	EMI FILTER	
L3046	J0JJC0000022	EMI FILTER	
L3047	J0JJC0000022	EMI FILTER	
L3049	J0JJC0000022	EMI FILTER	
L3051	J0MAB0000176	COIL	
L3052	J0MAB0000176	COIL	
L3053	J0MAB0000176	COIL	
L3054	J0MAB0000176	COIL	
L3501	J0JCC0000364	COIL	
L3502	J0JCC0000364	COIL	
L3503	J0JCC0000364	COIL	
L3504	J0JCC0000364	COIL	
L3505	J0JCC0000364	COIL	
L3506	J0JCC0000364	COIL	
L3507	J0JCC0000364	COIL	
L3602	J0JJC0000022	EMI FILTER	
L3605	J0JJC0000022	EMI FILTER	
L3606	J0JJC0000022	EMI FILTER	
L3607	J0JJC0000022	EMI FILTER	
L3608	J0JJC0000022	EMI FILTER	
L3610	J0JJC0000022	EMI FILTER	
L3611	ELJFA100JF	COIL	
L3612	J0JJC0000022	EMI FILTER	
L3615	J0JJC0000022	EMI FILTER	
L3617	J0JJC0000022	EMI FILTER	
L3620	J0JJC0000022	EMI FILTER	
L3623	J0JCC0000168	FILTER	
L3624	J0JCC0000168	FILTER	
L3625	J0JJC0000022	EMI FILTER	
L3626	J0JJC0000022	EMI FILTER	
L3627	J0JJC0000022	EMI FILTER	
L3631	J0JJC0000022	EMI FILTER	
L9703	J0JJC0000022	EMI FILTER	
L9704	J0JJC0000022	EMI FILTER	
L9814	J0JCC0000168	FILTER	
L9824	J0JCC0000168	FILTER	
L9825	J0JCC0000168	FILTER	
L9826	J0JCC0000168	FILTER	
L9908	J0JCC0000168	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
L9909	J0JCC0000168	FILTER	
L9950	J0JCC0000168	FILTER	
FL2506	J0HABB000021	FILTER	
FL2507	J0HABB000021	FILTER	
FL2508	J0HABB000021	FILTER	
FL2509	J0HABB000021	FILTER	
FL2510	J0HABB000021	FILTER	
FL2511	J0HABB000021	FILTER	
FL2512	J0HABB000021	FILTER	
FL2513	J0HABB000021	FILTER	
FL2514	J0HABB000021	FILTER	
FL2515	J0HABB000021	FILTER	
FL2516	J0HABB000021	FILTER	
FL2517	J0HABB000021	FILTER	
FL2518	J0HABB000021	FILTER	
FL2519	J0HABB000021	FILTER	
FL2520	J0HABB000021	FILTER	
FL2521	J0HABB000021	FILTER	
FL2522	J0HABB000021	FILTER	
FL2523	J0HABB000021	FILTER	
FL2524	J0HABB000021	FILTER	
FL2525	J0HABB000021	FILTER	
FL2526	J0HABB000021	FILTER	
FL2527	J0HABB000021	FILTER	
FL2536	J0HABB000021	FILTER	
FL2537	J0HABB000021	FILTER	
FL2538	J0HABB000021	FILTER	
FL2539	J0HABB000021	FILTER	
FL2540	J0HABB000021	FILTER	
FL2541	J0HABB000021	FILTER	
FL2542	J0HABB000021	FILTER	
FL2543	J0HABB000021	FILTER	
FL2544	J0HABB000021	FILTER	
FL2545	J0HABB000021	FILTER	
FL3003	J0HABC000011	FILTER	
FL3004	J0HABC000011	FILTER	
FL3005	J0HABC000011	FILTER	
FL3006	J0HABC000011	FILTER	
FL3007	J0HABC000011	FILTER	
FL3008	J0HABC000011	FILTER	
FL3019	J0HABB000021	FILTER	
FL3020	J0HABB000021	FILTER	
FL3021	J0HABB000021	FILTER	
FL3022	J0HABB000021	FILTER	
FL3023	J0HABB000021	FILTER	
FL3024	J0HABB000021	FILTER	
FL3025	J0HABB000021	FILTER	
FL3026	J0HABB000021	FILTER	
FL3027	J0HABB000021	FILTER	
FL3030	J0HABB000015	FILTER	
FL3031	J0HABB000015	FILTER	
FL9701	ELKE101FA	EMI FILTER	
FL9702	ELKE101FA	EMI FILTER	
FL9801	J0HABB000021	FILTER	
FL9802	J0HABB000021	FILTER	
FL9803	J0HABB000021	FILTER	
FL9804	J0HABB000021	FILTER	
FL9805	J0HABB000021	FILTER	
FL9806	J0HABB000021	FILTER	
FL9807	J0HABB000021	FILTER	
FL9808	J0HABB000021	FILTER	
FL9809	J0HABB000021	FILTER	
FL9810	J0HABB000021	FILTER	
FL9811	J0HABB000021	FILTER	
FL9812	J0HABB000021	FILTER	
FL9813	J0HABB000021	FILTER	
FL9814	J0HABB000021	FILTER	
FL9815	J0HABB000021	FILTER	
FL9816	J0HABB000021	FILTER	
FL9817	J0HABB000021	FILTER	
FL9818	J0HABB000021	FILTER	
FL9819	J0HABB000021	FILTER	
FL9820	J0HABB000021	FILTER	

Ref. No.	Part No.	Part Name & Description	Remarks
FL9821	J0HABB000021	FILTER	
FL9822	J0HABB000021	FILTER	
FL9823	J0HABB000021	FILTER	
FL9824	J0HABB000021	FILTER	
FL9825	J0HABB000021	FILTER	
FL9826	J0HABB000021	FILTER	
FL9827	J0HABB000021	FILTER	
FL9828	J0HABB000021	FILTER	
FL9901	J0HABB000021	FILTER	
FL9902	J0HABB000021	FILTER	
FL9903	J0HABB000021	FILTER	
FL9904	J0HABB000021	FILTER	
FL9905	J0HABB000021	FILTER	
FL9906	J0HABB000021	FILTER	
FL9907	J0HABB000021	FILTER	
FL9950	J0HABB000021	FILTER	
FL9951	J0HABB000021	FILTER	
FL9952	J0HABB000021	FILTER	
FL9953	J0HABB000021	FILTER	
FL9954	J0HABB000021	FILTER	
[RESISTORS]			
R2001	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2005	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R2006	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R2011	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2015	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2019	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2024	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2025	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2026	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2027	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2028	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2029	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2030	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2032	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2033	D1HG2208A002	RESISTOR	
R2034	ERJ6ENF51R0	M 51 OHM, 1/10W	
R2037	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2038	ERJ6ENF2002	M 20KOHM, 1/10W	
R2039	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2040	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2041	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2042	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2043	ERJ6ENF2492	M24.9KOHM, 1/10W	
R2044	D1HG2208A002	RESISTOR	
R2046	ERJ6GEYJ105	M 1MOHM,J,1/10W	
R2048	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2049	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2051	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2052	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2053	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2054	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2055	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2056	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2057	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2059	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2060	D1HG2208A002	RESISTOR	
R2061	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2063	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2065	D1HG2208A002	RESISTOR	
R2067	D1HG2208A002	RESISTOR	
R2069	EXB38V220J	RESISTOR ARRAY	
R2070	D1HG2208A002	RESISTOR	
R2075	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2076	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2078	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2079	D1HG2208A002	RESISTOR	
R2081	D1HG2208A002	RESISTOR	
R2083	D1HG2208A002	RESISTOR	
R2089	EXB38V220J	RESISTOR ARRAY	
R2090	D1HG2208A002	RESISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
R2092	D1HG2208A002	RESISTOR	
R2094	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2096	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2097	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2098	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2099	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2100	D1HG2208A002	RESISTOR	
R2102	D1HG2208A002	RESISTOR	
R2104	EXB38V220J	RESISTOR ARRAY	
R2105	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2106	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2107	EXB38V220J	RESISTOR ARRAY	
R2109	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2112	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2113	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2114	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2119	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2120	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2124	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2125	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2126	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2127	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2128	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2129	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2130	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2131	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2132	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2133	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2137	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2139	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2140	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2141	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2142	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2143	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2144	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2147	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2150	ERJ6ENF2491	M2.49KOHM, 1/10W	
R2151	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2152	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2153	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2154	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2155	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2157	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2158	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2159	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2160	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2161	ERJ6GEYJ220	M 22 OHM,J,1/10W	
R2162	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2163	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2164	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2165	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2166	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2168	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R2169	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R2172	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R2173	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2174	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2177	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2180	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2181	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2182	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2183	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2184	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2185	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2187	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2188	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2191	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2192	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2193	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2194	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2195	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2196	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2197	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2198	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2201	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2202	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2203	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2204	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2205	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2207	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2220	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2221	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2222	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R2223	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2224	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2225	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2226	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2227	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2228	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2229	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2231	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2232	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2233	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2235	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2236	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2238	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2240	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2241	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R2505	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2506	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2507	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2508	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2509	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2510	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2511	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2512	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2513	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2514	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2515	EXB38V472J	RESISTOR ARRAY	
R2516	EXB38V472J	RESISTOR ARRAY	
R2520	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2521	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2523	ERJ3GEYJ820	M 82 OHM,J,1/16W	
R2526	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2528	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R2529	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2530	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2531	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2533	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2534	ERJ3GEYJ271	M 270 OHM,J,1/16W	
R2535	ERJ3GEYJ271	M 270 OHM,J,1/16W	
R2536	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2537	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2538	D1HG2208A002	RESISTOR	
R2540	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2541	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2542	D1HG2208A002	RESISTOR	
R2544	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2545	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R2546	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R2547	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R2548	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R2549	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R2551	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2553	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2554	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R2555	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2556	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2557	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2558	EXB38V102J	RESISTOR ARRAY	
R2559	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2560	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2561	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2562	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R2563	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2564	ERJ3GEYJ220	M 22 OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2565	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2566	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2567	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2568	ERJ3GEYJ272	M 2.7KOHMJ,J1/16W	
R2569	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R2570	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2571	EXB28V103J	RESISTOR ARRAY	
R2572	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2573	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2574	EXB28V103J	RESISTOR ARRAY	
R2575	EXB28V103J	RESISTOR ARRAY	
R2576	EXB28V103J	RESISTOR ARRAY	
R2577	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2578	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2579	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2580	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2581	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2582	EXB28V103J	RESISTOR ARRAY	
R2583	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2584	ERJ3GEYJ821	M 820 OHM,J,1/16W	
R2585	ERJ3GEY0R00	M 0 OHM, 1/16W	
R2586	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2587	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2588	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R2590	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2591	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2592	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2593	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2594	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2595	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2596	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2597	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2598	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2599	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2600	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2601	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2602	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2603	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2604	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2605	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2606	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2607	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2608	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2609	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2610	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2612	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2613	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2614	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2615	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2616	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2617	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2621	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R2622	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2623	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2624	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2625	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2627	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2629	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2631	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2633	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2634	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2635	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2636	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2637	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2638	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R2639	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2640	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2641	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2642	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2643	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2644	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2645	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2646	ERJ3GEYJ102	M 1K OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R2647	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2648	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2649	ERJ3GEYJ821	M 820 OHM,J,1/16W	
R2650	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2651	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2652	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2653	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2654	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2655	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2656	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2657	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2658	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2659	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2660	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2661	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2662	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R2663	ERJ6ENF2202	M 2.2KOHM, 1/10W	
R2665	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2666	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2667	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2670	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2671	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2673	EXB38V472J	RESISTOR ARRAY	
R2674	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2675	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2676	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2677	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2678	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R2684	EXB38V472J	RESISTOR ARRAY	
R2686	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2687	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2688	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2697	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2698	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R2699	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2700	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2705	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2706	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R2707	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2708	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2709	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R2710	ERJ3GEYJ561	M 560 OHM,J,1/16W	
R2711	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R2712	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R2713	ERJ3GEYJ184	M 180KOHM,J,1/16W	
R2714	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R2715	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2716	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2717	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2718	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R2719	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2720	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2721	ERJ3GEYJ821	M 820 OHM,J,1/16W	
R2722	ERJ3GEYJ821	M 820 OHM,J,1/16W	
R2723	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R2724	ERJ3GEYJ821	M 820 OHM,J,1/16W	
R3001	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3004	EXB38V101J	RESISTOR ARRAY	
R3005	EXB38V101J	RESISTOR ARRAY	
R3007	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R3008	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R3009	ERJ2GE0R00	M 0 OHM, 0.063W	
R3014	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3015	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3016	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3017	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3019	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3020	ERJ2GE0R00	M 0 OHM, 0.063W	
R3021	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3022	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3023	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3024	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3025	ERJ3GEYJ473	M 47K OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3026	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3027	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3028	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3029	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3032	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3033	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3035	ERJ6GEYJ471	M 470 OHM,J,1/10W	
R3037	ERJ6ENF4700	M 470 OHM, 1/10W	
R3039	ERJ6ENF2700	M 270 OHM, 1/10W	
R3040	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3044	ERJ6GEYJ471	M 470 OHM,J,1/10W	
R3047	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3048	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3051	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3052	ERJ6GEYJ331	M 330 OHM,J,1/10W	
R3053	ERJ6GEYJ331	M 330 OHM,J,1/10W	
R3054	ERJ6GEYJ221	M 220 OHM,J,1/10W	
R3055	ERJ6GEYJ151	M 150 OHM,J,1/10W	
R3056	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3057	ERJ6ENF4700	M 470 OHM, 1/10W	
R3058	ERJ6ENF1401	M 1.4KOHM, 1/10W	
R3059	ERJ6ENF1001	M 1KOHM, 1/10W	
R3060	ERJ6ENF1401	M 1.4KOHM, 1/10W	
R3061	ERJ6ENF1001	M 1KOHM, 1/10W	
R3062	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3063	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3064	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3065	ERJ6ENF33R0	M 33 OHM, 1/10W	
R3066	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3067	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3068	ERJ6ENF4700	M 470 OHM, 1/10W	
R3069	ERJ6ENF1500	M 150 OHM, 1/10W	
R3070	ERJ6ENF1500	M 150 OHM, 1/10W	
R3071	ERJ6ENF1200	M 120 OHM, 1/10W	
R3072	ERJ6ENF2701	M 2.7KOHM, 1/10W	
R3073	ERJ6ENF2701	M 2.7KOHM, 1/10W	
R3076	ERJ3GEYJ221	M 220 OHM,J,1/16W	
R3077	ERJ3GEYJ105	M 1M OHM,J,1/16W	
R3078	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3079	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3081	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3082	ERJ2GEJ220	M 22 OHM, 0.063W	
R3083	ERJ2GEJ220	M 22 OHM, 0.063W	
R3084	ERJ2GEJ220	M 22 OHM, 0.063W	
R3091	D1HG5608A002	RESISTOR	
R3094	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R3095	ERJ3GEYJ391	M 390 OHM,J,1/16W	D0GB391JA002
R3100	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3101	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3102	EXB38V560J	RESISTOR ARRAY	
R3109	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3116	ERJ2GEJ560	M 56 OHM, 0.063W	
R3117	ERJ2GEJ560	M 56 OHM, 0.063W	
R3118	ERJ3GEYJ390	M 39 OHM,J,1/16W	
R3120	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3121	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3122	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3123	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3124	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3125	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3126	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3127	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3135	D1HG5608A002	RESISTOR	
R3147	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3148	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3149	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3150	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3154	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3155	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3156	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3157	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3158	ERJ6GEYJ271	M 270 OHM,J,1/10W	
R3161	ERJ6ENF75R0	M 75 OHM, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3162	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3163	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3164	ERJ6GEYJ271	M 270 OHM,J,1/10W	
R3165	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3166	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3167	ERJ6ENF75R0	M 75 OHM, 1/10W	
R3168	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3169	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R3170	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3171	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R3172	ERJ6GEYJ271	M 270 OHM,J,1/10W	
R3173	ERJ6GEYJ271	M 270 OHM,J,1/10W	
R3174	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3175	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3176	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3177	ERJ6GEYJ3R3	M 3.3OHM,J,1/10W	
R3180	ERJ3EKF2200	M 220 OHM, 1/16W	
R3181	ERJ3EKF2200	M 220 OHM, 1/16W	
R3182	ERJ3EKF2200	M 220 OHM, 1/16W	
R3183	ERJ3EKF2200	M 220 OHM, 1/16W	
R3184	ERJ6GEYJ560	M 56 OHM,J,1/10W	
R3185	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3186	ERJ3GEYJ473	M 47K OHM,J,1/16W	
R3187	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3191	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3192	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3193	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3194	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3195	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R3196	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3197	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3198	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3199	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R3203	ERJ3GEYJ183	M 18K OHM,J,1/16W	
R3205	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3206	ERJ3GEYJ273	M 27KOHM,J,1/16W	
R3207	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3208	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R3210	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R3212	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R3214	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R3215	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R3216	ERJ3GEYJ180	M 18 OHM,J,1/16W	
R3217	ERJ2GEJ220	M 22 OHM, 0.063W	
R3218	ERJ2GEJ220	M 22 OHM, 0.063W	
R3219	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3220	ERJ2GEJ220	M 22 OHM, 0.063W	
R3221	ERJ2GEJ560	M 56 OHM, 0.063W	
R3222	ERJ2GEJ560	M 56 OHM, 0.063W	
R3223	ERJ2GEJ560	M 56 OHM, 0.063W	
R3224	ERJ3GEYJ390	M 39 OHM,J,1/16W	
R3225	ERJ2GEJ220	M 22 OHM, 0.063W	
R3226	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3227	ERJ6ENF2741	M2.74KOHM, 1/10W	
R3230	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3231	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R3232	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3234	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3235	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R3243	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3245	ERJ6ENF4990	M 499 OHM, 1/10W	
R3247	ERJ2GEJ472	M 4.7KOHM, 0.063W	
R3248	D1HG2208A002	RESISTOR	
R3252	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R3253	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R3254	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3255	D1HG2208A002	RESISTOR	
R3259	D1HG2208A002	RESISTOR	
R3263	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3300	EXB38V390J	RESISTOR ARRAY	
R3301	ERJ2GEJ220	M 22 OHM, 0.063W	
R3302	ERJ2GEJ102	M 1K OHM, 0.063W	
R3304	ERJ3GEY0R00	M 0 OHM, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3305	ERJ2GEJ330	M 33 OHM, 0.063W	
R3306	ERJ2GEJ103	M 10K OHM, 0.063W	
R3308	ERJ2GEJ103	M 10K OHM, 0.063W	
R3312	ERJ3GEYJ390	M 39 OHM,J,1/16W	
R3313	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3314	ERJ2GEJ103	M 10K OHM, 0.063W	
R3316	ERJ2GEJ102	M 1K OHM, 0.063W	
R3320	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R3323	ERJ2GEJ103	M 10K OHM, 0.063W	
R3325	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3326	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3331	ERJ2GEJ220	M 22 OHM, 0.063W	
R3332	ERJ2GEJ220	M 22 OHM, 0.063W	
R3335	ERJ2GEJ103	M 10K OHM, 0.063W	
R3336	ERJ2GEJ220	M 22 OHM, 0.063W	
R3337	ERJ2GEJ220	M 22 OHM, 0.063W	
R3338	ERJ2GEJ220	M 22 OHM, 0.063W	
R3401	D1HG2208A002	RESISTOR	
R3402	D1HG2208A002	RESISTOR	
R3403	D1HG2208A002	RESISTOR	
R3411	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3412	ERJ2GEJ330	M 33 OHM, 0.063W	
R3416	EXB38V472J	RESISTOR ARRAY	
R3417	EXB38V472J	RESISTOR ARRAY	
R3418	EXB38V472J	RESISTOR ARRAY	
R3421	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3423	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3425	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3426	EXB28V220J	RESISTOR ARRAY	
R3427	D1HG2208A002	RESISTOR	
R3429	EXB28V220J	RESISTOR ARRAY	
R3430	EXB38V472J	RESISTOR ARRAY	
R3433	ERJ2GEJ220	M 22 OHM, 0.063W	
R3438	EXB28V220J	RESISTOR ARRAY	
R3439	D1HG2208A002	RESISTOR	
R3441	D1HG2208A002	RESISTOR	
R3443	D1HG2208A002	RESISTOR	
R3446	EXB28V220J	RESISTOR ARRAY	
R3448	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3451	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3452	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3453	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3454	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3455	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3459	EXB38V101J	RESISTOR ARRAY	
R3460	EXB28V220J	RESISTOR ARRAY	
R3461	D1HG2208A002	RESISTOR	
R3462	D1HG2208A002	RESISTOR	
R3463	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R3470	EXB28V220J	RESISTOR ARRAY	
R3471	EXB28V220J	RESISTOR ARRAY	
R3473	ERJ2GEJ220	M 22 OHM, 0.063W	
R3475	ERJ2GEJ220	M 22 OHM, 0.063W	
R3476	ERJ2GE0R00	M 0 OHM, 0.063W	
R3478	ERJ2GE0R00	M 0 OHM, 0.063W	
R3480	ERJ2GEJ220	M 22 OHM, 0.063W	
R3481	ERJ2GEJ220	M 22 OHM, 0.063W	
R3495	ERJ2GEJ102	M 1K OHM, 0.063W	
R3496	ERJ2GEJ102	M 1K OHM, 0.063W	
R3505	ERJ6GEYJ100	M 10 OHM,J,1/10W	
R3507	EXB28V220J	RESISTOR ARRAY	
R3515	EXB38V472J	RESISTOR ARRAY	
R3516	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3517	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3518	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3519	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3520	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3537	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R3540	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3541	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3542	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3543	ERJ6GEYJ221	M 220 OHM,J,1/10W	
R3544	ERJ6GEYJ473	M 47KOHM,J,1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3545	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R3546	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R3547	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R3548	ERJ3GEYJ330	M 33 OHM,J,1/16W	
R3561	EXB38V220J	RESISTOR ARRAY	
R3563	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3564	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3572	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3573	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3575	EXB38V220J	RESISTOR ARRAY	
R3576	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3577	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3578	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3579	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3580	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3581	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3582	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3583	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3584	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3640	EXB38V102J	RESISTOR ARRAY	
R3683	ERJ2GEJ103	M 10K OHM, 0.063W	
R3685	EXB38V472J	RESISTOR ARRAY	
R3686	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3691	ERJ2GEJ103	M 10K OHM, 0.063W	
R3692	ERJ2GEJ103	M 10K OHM, 0.063W	
R3693	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3694	ERJ2GEJ103	M 10K OHM, 0.063W	
R3695	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3699	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3701	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R3702	ERJ12YJ100	M 10 OHM,J, 1/2W	
R3703	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3706	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3709	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3710	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3712	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R3723	ERJ6ENF2001	M 2KOHM, 1/10W	
R3724	ERJ6ENF1801	M 1.8KOHM, 1/10W	
R3725	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3728	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3729	ERJ6ENF2001	M 2KOHM, 1/10W	
R3730	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3733	ERJ6ENF2001	M 2KOHM, 1/10W	
R3734	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3735	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3736	ERJ6ENF2700	M 270 OHM, 1/10W	
R3740	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3741	ERJ6ENF2700	M 270 OHM, 1/10W	
R3742	ERJ2GEJ822	M 8.2KOHM, 0.063W	
R3743	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3745	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R3746	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3750	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3751	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3752	ERJ6ENF2001	M 2KOHM, 1/10W	
R3753	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3754	ERJ6ENF2001	M 2KOHM, 1/10W	
R3755	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3756	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3757	ERJ6ENF2700	M 270 OHM, 1/10W	
R3758	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3759	ERJ6ENF2700	M 270 OHM, 1/10W	
R3760	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R3766	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R3767	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3768	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R3769	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3774	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3775	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3776	ERJ6ENF2700	M 270 OHM, 1/10W	
R3777	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R3778	ERJ6ENF2001	M 2KOHM, 1/10W	
R3779	ERJ8ENF1501	M 1.5KOHM 1/8W	

Ref. No.	Part No.	Part Name & Description	Remarks
R3782	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3783	ERJ6ENF2700	M 270 OHM, 1/10W	
R3786	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R3787	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3798	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3800	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3801	ERJ6ENF2001	M 2KOHM, 1/10W	
R3802	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3803	ERJ6ENF39R0	M 39 OHM, 1/10W	
R3804	ERJ6ENF2700	M 270 OHM, 1/10W	
R3805	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R3806	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3816	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	
R3818	ERJ6ENF2001	M 2KOHM, 1/10W	
R3819	ERJ8ENF1501	M 1.5KOHM 1/8W	
R3822	ERJ6ENF6201	M 6.2KOHM, 1/10W	
R3827	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R3833	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3834	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3835	ERJ2GEJ220	M 22 OHM, 0.063W	
R3836	ERJ3GEYJ271	M 270 OHM,J,1/16W	
R3845	D1HG2208A002	RESISTOR	
R3847	D1HG2208A002	RESISTOR	
R3849	ERJ2GEJ220	M 22 OHM, 0.063W	
R3850	ERJ2GEJ220	M 22 OHM, 0.063W	
R3851	D1HG2208A002	RESISTOR	
R3853	D1HG2208A002	RESISTOR	
R3860	ERJ2GEJ220	M 22 OHM, 0.063W	
R3861	ERJ2GEJ220	M 22 OHM, 0.063W	
R3862	ERJ2GEJ220	M 22 OHM, 0.063W	
R3863	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3865	ERJ2GEJ220	M 22 OHM, 0.063W	
R3866	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3867	ERJ2GEJ220	M 22 OHM, 0.063W	
R3868	ERJ2GEJ102	M 1K OHM, 0.063W	
R3869	ERJ2GEJ272	M 2.7KOHM, 0.063W	
R3870	ERJ2GEJ750	M 75 OHM, 0.063W	
R3871	ERJ2GEJ750	M 75 OHM, 0.063W	
R3873	ERJ2GEJ222	M 2.2KOHM, 0.063W	
R3874	ERJ2GEJ220	M 22 OHM, 0.063W	
R3878	ERJ2GEJ102	M 1K OHM, 0.063W	
R3879	D1HG2208A002	RESISTOR	
R3881	D1HG2208A002	RESISTOR	
R3883	ERJ2GEJ220	M 22 OHM, 0.063W	
R3884	D1HG2208A002	RESISTOR	
R3886	ERJ2GEJ750	M 75 OHM, 0.063W	
R3887	ERJ2GEJ272	M 2.7KOHM, 0.063W	
R3888	ERJ2GEJ750	M 75 OHM, 0.063W	
R3889	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3892	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3893	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3894	D1HG2208A002	RESISTOR	
R3896	ERJ2GEJ220	M 22 OHM, 0.063W	
R3898	D1HG2208A002	RESISTOR	
R3899	D1HG2208A002	RESISTOR	
R3901	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3902	ERJ3GEYJ151	M 150 OHM,J,1/16W	
R3903	ERJ2GEJ222	M 2.2KOHM, 0.063W	
R3904	ERJ2GEJ272	M 2.7KOHM, 0.063W	
R3905	ERJ2GEJ112	M 1.1KOHM, 0.063W	
R3906	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3907	ERJ3GEYJ821	M 820 OHM,J,1/16W	
R3908	ERJ3GEYJ681	M 680 OHM,J,1/16W	
R3909	ERJ6ENF1000	M 100 OHM, 1/10W	
R3910	ERJ3GEYJ471	M 470 OHM,J,1/16W	
R3911	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3912	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	
R3913	ERJ3GEYJ331	M 330 OHM,J,1/16W	
R3915	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3922	D1HG2208A002	RESISTOR	
R3926	D1HG2208A002	RESISTOR	
R3928	ERJ2GEJ220	M 22 OHM, 0.063W	
R3929	ERJ2GEJ220	M 22 OHM, 0.063W	
R3930	ERJ2GEJ220	M 22 OHM, 0.063W	
R3936	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R3938	ERJ2GEJ220	M 22 OHM, 0.063W	
R3948	ERJ2GE0R00	M 0 OHM, 0.063W	
R3949	ERJ2GEJ220	M 22 OHM, 0.063W	
R3950	ERJ2GEJ220	M 22 OHM, 0.063W	
R3970	ERJ3GEY0R00	M 0 OHM, 1/16W	
R3978	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3979	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3980	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R3981	ERJ3GEYJ100	M 10 OHM,J,1/16W	
R9601	ERJ6ENF3300	M 330 OHM, 1/10W	
R9602	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R9603	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9604	ERJ3GEYJ103	M 10K OHM,J,1/16W	
R9606	ERJ3GEYJ220	M 22 OHM,J,1/16W	
R9701	ERJ1TYJ221	M 220 OHM, 1W	
R9702	ERJ1TYJ221	M 220 OHM, 1W	
R9703	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9704	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9705	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9706	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9707	ERJ3GEYJ102	M 1K OHM,J,1/16W	
R9801	ERDS2FJ1R0	C 0 OHM, 1/4W	
R9802	ERJ3GEYJ223	M 22K OHM,J,1/16W	
R9803	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R9804	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R9805	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R9806	D1HG1018A002	RESISTOR	
R9807	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9808	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9809	ERJ6GEYJ391	M 390 OHM,J,1/10W	
R9810	ERJ3GEYJ223	M 22K OHM,J,1/16W	
R9811	ERJ6GEYJ2R2	M 2.2 OHM,J,1/10W	
R9812	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R9813	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9814	ERJ3GEYJ272	M 2.7KOHM,J,1/16W	
R9815	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	
R9816	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R9817	ERJ6GEY0R00	M 0 OHM,J,1/10W	
R9818	ERJ3GEYJ101	M 100 OHM,J,1/16W	D0GB101JA002
R9819	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9820	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9821	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9822	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9823	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9824	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9825	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9826	ERJ6GEYJ101	M 100 OHM,J,1/10W	
R9827	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R9828	EXB38V103J	RESISTOR ARRAY	
R9829	EXB38V103J	RESISTOR ARRAY	
R9901	ERJ3GEYJ470	M 47 OHM,J,1/16W	
R9902	ERJ6GEYJ181	M 180 OHM,J,1/10W	
R9903	ERJ6GEYJ181	M 180 OHM,J,1/10W	
R9904	ERJ6GEYJ181	M 180 OHM,J,1/10W	
R9905	ERJ6GEYJ181	M 180 OHM,J,1/10W	
R9906	ERJ6GEYJ181	M 180 OHM,J,1/10W	
R9950	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R9951	ERJ6ENF1501	M 1.5KOHM, 1/10W	
R9952	ERJ6ENF1501	M 1.5KOHM, 1/10W	
R9953	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R9954	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R9955	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R9956	ERJ6ENF3302	M 33KOHM, 1/10W	
R9957	ERJ6ENF5601	M 5.6KOHM, 1/10W	
R9958	ERJ6ENF1501	M 1.5KOHM, 1/10W	
R9959	ERJ6ENF1501	M 1.5KOHM, 1/10W	
R9960	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R9961	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R9962	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R9963	ERJ6ENF3302	M 33KOHM, 1/10W	
R9964	ERJ6ENF5601	M 5.6KOHM, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R9965	ERJ6ENF1501	M 1.5KOHM, 1/10W	
R9966	ERJ6ENF1501	M 1.5KOHM, 1/10W	
R9967	ERJ6ENF2201	M 2.2KOHM, 1/10W	
R9968	ERJ6ENF3301	M 3.3KOHM, 1/10W	
R9969	ERJ6ENF6801	M 6.8KOHM, 1/10W	
R9970	ERJ6ENF3302	M 33KOHM, 1/10W	
R9971	ERJ3GEYJ470	M 47 OHM,J,1/16W	
[CAPACITORS]			
C2002	EEEHB0J470R	E 47UF, 6.3V	
C2003	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2004	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2005	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2006	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2007	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2008	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2009	ECJ1XC1H150J	C 150PF, 50V	
C2010	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2011	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2012	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2013	ECJ1XC1H150J	C 150PF, 50V	
C2014	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2015	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2016	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2017	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2018	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2019	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2020	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2021	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2022	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2023	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2024	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2025	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2026	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2027	EEEHB1C470P	E 47UF, 16V	
C2029	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2030	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2031	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2032	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2033	EEEHB1C470P	E 47UF, 16V	
C2034	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2035	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2036	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2037	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2038	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2039	EEEHB0J470R	E 47UF, 6.3V	
C2041	EEEHB0J470R	E 47UF, 6.3V	
C2042	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2043	EEEHB0J470R	E 47UF, 6.3V	
C2044	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2045	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2046	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2047	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2048	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2049	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2050	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2051	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2052	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2053	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2054	EEEHB0J470R	E 47UF, 6.3V	
C2055	EEEHB0G221P	E 220UF, 4V	
C2056	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2057	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2058	EEEHB0J470R	E 47UF, 6.3V	
C2059	EEEHB1C470P	E 47UF, 16V	
C2060	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2061	EEEHB0J101P	E 100UF, 6.3V	
C2062	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2063	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2064	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2073	ECJ2XF1C105Z	C 1UF, Z, 16V	
C2074	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C2075	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C2076	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2077	EEFCD0K330R	CAPACITOR	
C2501	EEEHB1C470P	E 47UF, 16V	
C2502	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2503	EEEHB0J101P	E 100UF, 6.3V	
C2504	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2505	EEEHB0J470R	E 47UF, 6.3V	
C2506	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2507	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2508	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2510	ECJ1XC1H150J	C 150PF, 50V	
C2511	ECJ1XC1H150J	C 150PF, 50V	
C2512	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2513	EEEHB0J470R	E 47UF, 6.3V	
C2514	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2515	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2516	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2517	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2518	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2519	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2520	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2521	EEEHB0J470R	E 47UF, 6.3V	
C2522	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2523	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2524	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2525	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2526	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2527	ECJ1XC1H471J	C 470PF, J, 50V	
C2528	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2529	EEEHB0J470R	E 47UF, 6.3V	
C2530	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2531	ECJ1XC1H100C	C 10PF, 50V	
C2532	ECJ1XC1H100C	C 10PF, 50V	
C2533	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2534	EEEHB0J470R	E 47UF, 6.3V	
C2535	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2536	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2537	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2538	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2539	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2540	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2541	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2542	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2543	EEEHB0J470R	E 47UF, 6.3V	
C2544	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2545	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2546	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2547	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2548	ECJ1XF1A105Z	C 100UF, 10V	
C2549	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2550	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2551	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2552	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2553	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2554	ECJ1XB1H103K	C 0.01UF, K, 50V	
C2556	ECJ1XB1H103K	C 0.01UF, K, 50V	
C2558	ECJ1XC1H101J	C 100PF, J, 50V	
C2559	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2560	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2561	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2562	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2563	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2564	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2570	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2580	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2581	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2582	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2583	EEEHB0G221P	E 220UF, 4V	
C2584	EEEHB0G221P	E 220UF, 4V	
C2585	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2586	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C2587	ECJ2XF1C105Z	C 1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C2589	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3000	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3001	EEEHP1E4R7R	E 4.7UF, 25V	
C3002	ECJ0EB1H102K	C 1000PF, 50V	
C3003	EEEHP1E4R7R	E 4.7UF, 25V	
C3004	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3007	ECJ1XF1A105Z	C 100UF, 10V	
C3010	EEEHB1C100R	E 10UF, 16V	
C3011	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3014	ECJ1XC1H680J	C 68PF, J, 50V	
C3017	ECJ3XF1C475Z	C 4.7UF, Z, 16V	
C3018	ECJ1XC1H680J	C 68PF, J, 50V	
C3019	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3020	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3023	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3025	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3027	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3029	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3030	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3032	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3033	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3034	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3035	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3036	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3037	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3038	ECJ1XF1A105Z	C 100UF, 10V	
C3039	ECJ1XF1A105Z	C 100UF, 10V	
C3040	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3041	ECJ3XF1C475Z	C 4.7UF, Z, 16V	
C3042	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3043	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3044	ECJ1XF1A105Z	C 100UF, 10V	
C3045	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3046	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3047	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3048	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3049	ECJ1XC1H150J	C 150PF, 50V	
C3050	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3051	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3052	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3053	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3054	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3055	ECJ1XC1H150J	C 150PF, 50V	
C3056	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3058	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3059	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3060	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3061	ECJ1XF1A105Z	C 100UF, 10V	
C3062	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3063	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3064	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3065	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3066	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3067	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3068	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3069	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3070	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3071	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3072	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3074	EEEHP1C100R	E 10UF, 16V	
C3075	EEEHP1C100R	E 10UF, 16V	
C3076	EEEHB1C100R	E 10UF, 16V	
C3077	EEEHB1C100R	E 10UF, 16V	
C3078	EEEHB0J330R	E 33UF, 6.3V	
C3081	EEEHB0J330R	E 33UF, 6.3V	
C3082	EEEHP1C100R	E 10UF, 16V	
C3083	EEEHP1C100R	E 10UF, 16V	
C3084	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3085	EEEHB0J330R	E 33UF, 6.3V	
C3086	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3087	EEEHB0J330R	E 33UF, 6.3V	
C3088	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3089	EEEHB0J330R	E 33UF, 6.3V	
C3090	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3091	EEEHP0J470P	E 47UF, 6.3V	
C3092	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3093	EEEHP0J470P	E 47UF, 6.3V	
C3094	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3095	EEEHP0J470P	E 47UF, 6.3V	
C3097	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3099	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3101	EEEHB1C100R	E 10UF, 16V	
C3104	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3105	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3106	ECJ1XC1H151J	C 150PF, 50V	
C3107	ECJ1XF1A105Z	C 100UF, 10V	
C3108	ECJ3XF1C475Z	C 4.7UF, Z, 16V	
C3109	ECJ3XF1C475Z	C 4.7UF, Z, 16V	
C3110	ECJ3XF1C475Z	C 4.7UF, Z, 16V	
C3111	ECJ1XB1H472K	C 4700PF, K, 50V	
C3112	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3120	ECJ1XC1H221J	C 220PF, 50V	
C3121	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3122	ECJ2XC1H391J	C 390PF, J, 50V	
C3123	EEEHB0J470R	E 47UF, 6.3V	
C3124	ECJ1XC1H181J	C 180PF, J, 50V	
C3125	EEEHB1C100R	E 10UF, 16V	
C3126	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3128	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3129	ECJ1XF1A105Z	C 100UF, 10V	
C3130	EEEHB0J470R	E 47UF, 6.3V	
C3131	ECUX1H473ZFV	C 0.047UF, 50V	ECJ1XF1H473Z
C3132	ECUX1H473ZFV	C 0.047UF, 50V	ECJ1XF1H473Z
C3134	ECUX1H473ZFV	C 0.047UF, 50V	ECJ1XF1H473Z
C3135	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3138	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3139	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3140	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3141	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3142	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3143	ECJ0EB1C822K	C 8200PF, 16V	
C3144	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3147	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3148	ECJ0EB1A823K	C 0.01UF, 10V	
C3149	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3150	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3153	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3156	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3157	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3158	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3159	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3160	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3162	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3164	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3165	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3166	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3170	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3172	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3173	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3174	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3175	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3176	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3177	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3178	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3179	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3180	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3181	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3182	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3300	EEEHB1E4R7R	E 4.7UF, 25V	
C3301	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3302	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3303	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3304	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3305	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3306	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3307	ECJ1XF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3308	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3309	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3310	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3311	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3312	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3313	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3314	EEEHB0J470R	E 47UF, 6.3V	
C3315	EEEHB0G221P	E 220UF, 4V	
C3317	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3318	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3319	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3320	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3321	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3322	EEEHB1E4R7R	E 4.7UF, 25V	
C3323	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3324	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3325	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3326	EEEHB0G221P	E 220UF, 4V	
C3327	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3328	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3329	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3330	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3331	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3332	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3333	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3334	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3335	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3336	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3337	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3338	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3339	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3344	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3345	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3346	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3347	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3348	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3349	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3350	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3351	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3352	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3353	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3354	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3355	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3356	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3357	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3359	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3360	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3361	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3362	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3368	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3369	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3370	ECJ1XF1A105Z	C 100UF, 10V	
C3372	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3373	ECJ1XC1H680J	C 68PF, J, 50V	
C3384	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3385	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3390	EEEHB0J330R	E 33UF, 6.3V	
C3392	ECJ1XF1A105Z	C 100UF, 10V	
C3393	EEEHP1A100R	E 10UF, 10V	
C3394	EEEHB0J330R	E 33UF, 6.3V	
C3397	ECJ1XB1H103K	C 0.01UF, K, 50V	
C3398	ECJ1XC1H101J	C 100PF, J, 50V	
C3399	ECJ1XC1H101J	C 100PF, J, 50V	
C3400	EEEHB1E4R7R	E 4.7UF, 25V	
C3401	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3402	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3403	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3421	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3422	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3423	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3424	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3425	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3426	ECJ1XF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3427	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3428	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3429	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3430	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3431	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3432	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3433	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3434	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3640	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3644	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3645	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3646	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3650	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3651	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3653	EEEHB1E330P	E 33UF, 25V	
C3654	EEEHB1E330P	E 33UF, 25V	
C3656	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3657	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3658	EEEHB1E330P	E 33UF, 25V	
C3659	EEEHB1E330P	E 33UF, 25V	
C3660	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3661	EEEHB1E330P	E 33UF, 25V	
C3662	EEEHB1E330P	E 33UF, 25V	
C3663	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3664	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3667	EEEHB1E330P	E 33UF, 25V	
C3669	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3671	EEEHB1E330P	E 33UF, 25V	
C3672	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3675	EEEHB1E330P	E 33UF, 25V	
C3676	EEEHB1E330P	E 33UF, 25V	
C3679	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3684	EEEHB1C470P	E 47UF, 16V	
C3689	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3690	ECJ1XC1H471J	C 470PF, J, 50V	
C3691	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3692	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3693	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3694	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3695	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3696	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3697	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3701	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3702	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3703	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3704	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3705	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3706	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3707	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3708	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3709	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3710	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3711	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3712	EEEHB0J101P	E 100UF, 6.3V	
C3716	ECJ1XB1A334K	C 0.22UF, 10V	
C3717	ECJ1XB1A334K	C 0.22UF, 10V	
C3718	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3719	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3720	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3721	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3722	ECJ2XF1C225Z	C 2.2UF, Z, 16V	
C3723	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3724	ECJ1XF1A105Z	C 100UF, 10V	
C3725	ECJ1XF1A105Z	C 100UF, 10V	
C3726	ECJ1XF1A105Z	C 100UF, 10V	
C3727	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3728	ECJ1XF1A105Z	C 100UF, 10V	
C3729	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3730	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3731	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3732	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3733	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3734	ECJ1XF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3735	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3736	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3737	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3738	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3739	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3740	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3741	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3742	ECJ2XF1C225Z	C 2.2UF, Z, 16V	
C3744	ECJ1XF1A105Z	C 100UF, 10V	
C3745	ECJ1XC1H121J	C 120PF, 50V	
C3746	ECJ1XC1H471J	C 470PF, J, 50V	
C3747	ECJ1XF1A105Z	C 100UF, 10V	
C3748	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3749	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3750	ECJ1XF1A105Z	C 100UF, 10V	
C3751	ECJ1XF1A105Z	C 100UF, 10V	
C3752	ECJ1XF1A105Z	C 100UF, 10V	
C3753	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3754	ECJ2XF1C225Z	C 2.2UF, Z, 16V	
C3755	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3756	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3757	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3759	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3760	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3762	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3763	EEEHB1E4R7R	E 4.7UF, 25V	
C3764	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3765	EEEHB0G101R	E 100UF, 4V	
C3766	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3767	EEEHB0G101R	E 100UF, 4V	
C3769	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3781	EEEHB1E4R7R	E 4.7UF, 25V	
C3785	EEEHB1E330P	E 33UF, 25V	
C3788	EEEHB0G101R	E 100UF, 4V	
C3790	EEEHB0J101P	E 100UF, 6.3V	
C3791	EEEHB1A101P	E 100UF, 10V	
C3792	EEEHB1E4R7R	E 4.7UF, 25V	
C3794	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3795	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3796	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3797	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3798	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3799	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C3800	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C3803	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C3804	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3805	ECJ1XB0J105K	C 1UF, Z, 6.3V	
C3806	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9602	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9702	F4D276050002	CAPACITOR	
C9703	F4D276050002	CAPACITOR	
C9704	F4D276050002	CAPACITOR	
C9705	F4D276050002	CAPACITOR	
C9706	F4D276050002	CAPACITOR	
C9801	ECJ1XF1A105Z	C 100UF, 10V	
C9802	ECJ1XF1A105Z	C 100UF, 10V	
C9803	ECJ1XF1A105Z	C 100UF, 10V	
C9804	EEEHB0J470R	E 47UF, 6.3V	
C9805	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9806	ECJ1XF1A105Z	C 100UF, 10V	
C9807	ECJ1VF1C105Z	C 0.01UF, Z, 16V	
C9808	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9814	ECJ1XF1A105Z	C 100UF, 10V	
C9815	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9818	ECJ1XB1H103K	C 0.01UF, K, 50V	
C9820	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9821	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9822	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9823	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9824	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9825	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9826	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9827	ECJ1XF1C104Z	C 0.1UF, Z, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C9828	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9901	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9902	EEEHB0J470R	E 47UF, 6.3V	
C9950	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9951	ECJ1XF1C104Z	C 0.1UF, Z, 16V	
C9952	EEEHB0J470R	E 47UF, 6.3V	
[OTHERS]			
A1	VJS3913D006B	6P CONNECTOR	K1MN06B00049
A2	K1MN09B00045	9P CONNECTOR	
A3	K1MN13A00050	13P CONNECTOR	
A5	K1KA11B00040	11P CONNECTOR	
A6	K1KA12B00098	12P CONNECTOR	
A7	K1KA03B00098	3P CONNECTOR	
A8	K1KA02B00053	2P CONNECTOR	
A9	K1KA02B00051	2P CONNECTOR	
A10	K1KA02B00079	2P CONNECTOR	
A20	K1KA04B00007	4P CONNECTOR	
A21	TJSF43704	4P CONNECTOR	K1KA04B00137
A22	K1KA08B00005	8P CONNECTOR	
A24	K1KA04B00007	4P CONNECTOR	
A25	TJS6A8780	3P CONNECTOR	K1KA03B00006
A26	TJS6A8780	3P CONNECTOR	K1KA03B00006
A27	TJS6A8780	3P CONNECTOR	K1KA03B00006
A30	TJS6A8780	3P CONNECTOR	K1KA03B00006
A31	K1KA04B00007	4P CONNECTOR	
A32	TJS6A8780	3P CONNECTOR	K1KA03B00006
A34	K1KA04B00007	4P CONNECTOR	
A40	K1KA08B00137	8P CONNECTOR	
A41	K1MN16B00012	16P CONNECTOR	
A42	TJSF11906	6P CONNECTOR	K1KA06B00074
A43	K1KA10B00121	10P CONNECTOR	
A61	K1KA06B00054	6P CONNECTOR	
A100	K1KA06A00189	6P CONNECTOR	
CW1	K1KA03A00153	3P CONNECTOR	
D1	K1KA04A00242	4P CONNECTOR	
J1	K1MN13B00082	13P CONNECTOR	
R1	K1MN09B00079	9P CONNECTOR	
S1	K1MN06B00154	6P CONNECTOR	
B2501	BCR20V4	BATTERY HOLDER	
JK2001	K2LC108B0050	LAN TERMINAL	
JK2003	K1FB124B0024	DVI IN TERMINAL	
JK3001	TJSF42904	S-VIDEO IN TERMINAL	K1CB204B0004
JK3002	K1FB115B0079	RGB2 IN TERMINAL	
JK3003	K1QBB5AB0005	RGB1 IN TERMINAL	
JK3004	K1QBB1CB0003	VIDEO IN TERMINAL	
JK9801	TJS1A7250	REMOTE IN TERMINAL	K2HC103B0093
JK9802	K2HC103B0031	REMOTE OUT TERMINAL	
JK9803	K1FA109B0055	RS-232C OUT TERMINAL	
JK9804	K1FB109B0069	RS232C IN TERMINAL	
JK9805	K1FB109B0069	REMOTE IN 1 TERMINAL	
JS3609	ERJ6GEY0R00	M 0 OHM,J,1/10W	
JS3610	ERJ6GEY0R00	M 0 OHM,J,1/10W	
RM9901	B3RAD0000036	REMOTE CONTROL RECEIVER	
RM9950	B3RAD0000036	REMOTE CONTROL RECEIVER	
SW9950	EVQ11G05R	SWITCH	
SW9951	EVQ11G05R	SWITCH	
SW9952	EVQ11G05R	SWITCH	
SW9953	EVQ11G05R	SWITCH	
SW9954	EVQ11G05R	SWITCH	
SW9955	EVQ11G05R	SWITCH	
SW9956	EVQ11G05R	SWITCH	
SW9957	EVQ11G05R	SWITCH	
SW9958	EVQ11G05R	SWITCH	
SW9959	EVQ11G05R	SWITCH	
SW9960	EVQ11G05R	SWITCH	
SW9961	EVQ11G05R	SWITCH	
SW9962	EVQ11G05R	SWITCH	
SW9963	EVQ11G05R	SWITCH	
SW9964	EVQ11G05R	SWITCH	

Ref. No.	Part No.	Part Name & Description	Remarks
SW9965	EVQ11G05R	SWITCH	
X2002	H1A6605B0004	CRYSTAL	
X2003	H0J250500042	CRYSTAL	
X2501	H0J983400016	CRYSTAL	
X2502	H0J327200038	CRYSTAL	
X3000	H0J202500002	CRYSTAL	
X3002	H1A6005B0012	CRYSTAL	
	N0ZZ00000012	BALLAST UNIT	⚠
	TXAUX01VJW2	POWER UNIT	PT-D5500U/UL
	TXAUX01PWJZ	POWER UNIT	PT-D5500E/EL
RTL	TXN/A2VJW2	CIRCUIT BOARD A	
RTL	TXN/D1VJW2	CIRCUIT BOARD D	
RTL	TXN/J1VJW2	CIRCUIT BOARD J	
RTL	TXN/R1VJW2	CIRCUIT BOARD R	
RTL	TXN/S2VJW2	CIRCUIT BOARD S	
RTL	TXNCW1VJW2	CIRCUIT BOARD CW	